Death *ex machina*? The use of technology and its impact on genocide and prevention

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Contribution

This thesis is my own work except where otherwise acknowledged.

Chapters 1, 3 and 5 are based on published works. Two of these publications were written with a co-author, Devin Bowles – BA(Hons) Anthropology, MA(Hons) Anthropology, BSc(Hons) Psychology.

Chapter	Published work	Macgregor's contribution to thesis chapter
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Contents

Abstract

The rapid pace of technology's evolution and uptake since the end of the Cold War, coupled with its role as a driver of many recent political changes, suggests that some uses of technology might contribute to genocide. Technological change and new developments in its use can redistribute power and impact the global environment, as well as reshaping the dynamics of local natural, political and social environments. Use of new media, including the internet, social media and mobile phones, promotes "citizen journalism", in which news and video footage is gathered and disseminated by amateurs. Citizen journalism is increasing during times of conflict and there exists a hotly contested "arms race" for control of these fora between genocidal governments, resistance groups and foreign governments and their citizens. By democratising control of communication, use of new media might shift the balance of power toward those who would resist, or prevent, genocide.

An increasing and unsustainable use of technology has contributed to climate change. Climate change will likely enhance genocide risk through a number of causal pathways including resource scarcity, inequality and reduced economic growth. Implications for prevention are assessed with a focus on the doctrine of the Responsibility to Protect (R2P). This thesis works toward filling a major policy gap in R2P, in which international responsibility to prevent and intervene in genocide remains diffuse, allowing for inaction. Rather than weakening the doctrine, linking genocide prevention with action to mitigate climate change would strengthen its standing as an international norm.

The insight that technology use can influence genocide is applied to genocide prevention. Evidence suggests that aspects of technology use can be harnessed for prevention, and these are often most effectively used "upstream", well before genocide is imminent.

Introduction: Genocide causation theory and prevention

Theories of genocide causation

Scholars have developed a variety of theories on the causes of genocide. They are, however, almost all based on a characterisation of genocide as being fundamentally motivated by political factors. Fein contends that "ideological genocides" are caused by hegemonic myths, and sometimes extreme religious views, which identify the victims as being outside the perpetrator's "sanctioned universe of obligation" (Fein 1984:18). Kuper wrote of genocides against "scapegoat" groups (Kuper 1984:36, 37). Another type identified by Fein is "retributive genocide", where two peoples are "locked into an ethnically stratified order in a plural society" – as when two "nations" are assimilated into one state with one group becoming the governing and the other the subject class. The status of the ruling class arises from its role in a political order and genocide becomes a means through which the governing class quashes subject class rebellion (Fein 1984:11). Kuper calls this "genocide following the decolonisation of a two-tier structure of domination" (1984:34). Fein also claims that a history of war (or genocide) increases the risk of future genocide (1984). "Developmental" is the name used by Fein (1984) to refer to a form of genocide which Kuper calls "genocides against indigenous peoples" (1984:32).[1] These commonly occurred during colonisation. They are "utilitarian", aimed at getting rid of "obstacles" blocking the path of economic exploitation. Genocides also occur in the process of struggles for autonomy or secession by ethnic or religious groups (Kuper 1984:35).

Other theories of genocide causation focus on the proximate rather than the root cause. "Cultural genocide" occasionally appears in the literature but it is a controversial term.

[1] In some texts and discussions, the term "ethnocide" has been used where native peoples are the victims.

The atrocities committed by the Chinese in Tibet have been described as a cultural genocide or as a case of the eradication of religion (Wangyal 1984:119). The killing of political groups, or "politicide", is sometimes added to the list but is also a contentious subject (Kuper 2002:57,58). The final commonly recognised type is "faminogenic genocide", when a government knowingly creates or prolongs conditions which result in starvation because it intends to exterminate its citizens through famine (Marcus 2003:247-248).

While it appears that a number of genocidal causes have been identified, almost all focus on political motivations. Of these commonly recognised types, only cultural genocide and "faminocide" can be defined by anything else – they are part of a subset of genocides based essentially on the specific technique employed rather than the motive, intent or root cause.

The United Nations initiated an international treaty in 1948, legislating the *Convention on the Prevention and Punishment of the Crime of Genocide.* The crime and its prevention were seen as concomitant, but the literature that ensued after 1948 was almost exclusively about analyses of case studies. Little was said, let alone done, about prevention. This thesis addresses that issue.

One approach sees legal structures and enforcement as the central means of genocide prevention. The Nuremberg Tribunal of Nazi officials established important principles. It defined crimes against humanity as part of the general principles of law and made certain defences such as "following orders" unavailable – the individual was now considered responsible (Schabas 1997, Tatz 2003:150). After the Nuremberg and Tokyo trials of the Axis leaders, there were no new international tribunals until the

Security Council created the international tribunals for Rwanda (ICTR) and the former Yugoslavia (ICTY) in the 1990s (Fierke 2005:73). The apparent success of the ICTY and the ICTR led to the Statute of Rome in July 1998, a treaty which created the International Criminal Court (ICC). In operation since 11 April 2002, the Court is a permanent tribunal which seeks to prosecute individuals for genocide, crimes against humanity, apartheid, war crimes and the "crime of aggression". It was designed to complement national judicial systems already in existence, as it can only exercise its jurisdiction when national courts are unwilling or unable to investigate or prosecute. It is, therefore, primarily left to individual states to prosecute criminals (Anton 2005:715). The Security Council can, however, refer cases to the court. The existence of the court means that, for the first time, crimes committed within an internal armed conflict are specifically criminalised (Breau 2005:227). The ICC accepted the UN Convention on Genocide, reproducing it verbatim into its own Charter (Totten 2006:11).

Another approach is to seek prevention by sanctions, that is, the withholding of arms, fuel, goods and services. This thesis does not traverse that strategy. It is, essentially, a tactic that has repeatedly failed to achieve its key intended outcome. If we look back at the efforts of the League of Nations, we see the futility of sanctions – often condemned at the time as being too little, too late, divisive among member States and undermining the credibility of the organisation itself – in stopping Italy from attacking the country then known as Abyssinia, or Japan from committing war crimes in China's Nanking. Since the United Nations' establishment, a significant number and variety of sanctions and boycott programs have been implemented under its authorisation. Such packages of punitive and isolating measures failed to end apartheid in South Africa, or a unilateral declaration of independence by South Rhodesia (Zimbabwe); they didn't stop atrocities or full-scale genocide in countries like the Democratic Republic of Congo, Darfur and

now the Nuba Hills region. They didn't stop Saddam Hussein in Iraq and they seemingly have had little *real* effect on modern Iran in terms of achieving a formal renunciation of nuclear weaponry.

The world since the Cold War

The rate of technological change has increased exponentially since the end of the Cold War. In 1990, the World Wide Web was developed and subsequently computing power and mobile communication has advanced rapidly. YouTube, the online video sharing and viewing forum was invented in 2005. There were significant medical advances, for example the "smart pill" developed in 1992; "spray on skin" for burn recovery in 1993; in 1994, HIV protease inhibitors; the first artificial heart implantation in 1996. The field of genetics has also advanced rapidly. In 1994, the commercial sale of genetically modified foods began. In 1996, scientists in Scotland cloned the first mammal, Dolly the sheep. "Green technology" has also flourished. The demand for solar power has increased and many large solar plants are under construction around the world. Many new products have been developed to require smaller amounts of energy or energy from a renewable source. In 2008, the Tesla Roadster was developed. The first all-electric car on the market, it can be plugged into conventional power outlets to recharge.

The availability of technology has also radically expanded. As the technology improves, products become cheaper, more affordable and more accessible to a wider public, across the whole social spectrum and around the globe. Many more people now own cars and this number is increasing. Dargay et al. predict that the total global vehicle stock will increase from approximately 800 million in 2002 to over 2 billion in 2030. By this time, 56 per cent of the world's vehicles will be owned by non-OECD countries compared to 24 per cent in 2002. They project that China's vehicle stock will increase nearly twenty-

fold to 390 million in 2030 (Dargay et al. 2007:1). More people now own mobile phones: approximately three-quarters of the world's inhabitants now have access to a mobile phone. The number of mobile subscriptions in use worldwide has increased from fewer than 1 billion in 2000 to over 6 billion in 2012 (The World Bank press release, 2012).

While Francis Fukuyama's concept of the "end of history" has not come to pass, since the end of the Cold War the degree of global political change has been muted (Fukuyama 1992). Major international political developments since then are few. Three stand out. First, China is developing into a new political, military and economic superpower. Second, there has been an increase in global terrorism, particularly as perpetrated by Islamic extremists. The attack on the World Trade Centre in 2001 had profound ramifications across the globe still felt today. Third, the more recent "Arab Spring", involving many pro-democracy rebellions across the Arab world, has changed the political environment in many countries and could have a profound impact on the region as a whole in coming years.

The foregoing examples demonstrate not only the comparatively slow pace of political change in recent decades but also that technology, which is both advancing and spreading rapidly, has often proven a significant driver of key elements of this change. In relation to the rise of China as a new global superpower, technology has been used to boost the economy, for example, through increased infrastructure and product development. Technology has played a part in the increase in global terrorism in that it has enhanced the destructive power of the terrorists, for example terrorists now take advantage of information technology (Kaplan 2009) and have access to advanced weaponry (Bonomo et al. 2007). Somewhat hypocritically, this "Western" technology is

often vehemently denounced by terrorists as contributing to the corruption of traditional values and, in this way, paradoxically, is central to their very existence as a political force. As discussed in subsequent chapters, the Arab Spring was made possible by widespread access to video technology and social media communication across the Arab world. Technology is not the only, nor even the most important, determinant of political events, but it is a factor which interacts synergistically with other determinants of political change.

Despite the rapid pace of technological change and uptake, coupled with its role as a driver of many recent political changes, its contribution to genocide is being neglected by academia. Even if the main causes of genocide are political, in situations of relative global political stability, the importance of technological and other factors increases. On its own, technology does nothing to influence genocide; however, access and use of technology can redistribute power. Widespread use of technology can also impact the global environment, as well as local natural, political and social environments. Accordingly, technology can facilitate or hinder genocide, and therefore can also facilitate or hinder genocide prevention. This thesis examines modern media and climate change – two very different aspects of technological change and distribution since the end of the Cold War – and their impact on both genocide and genocide prevention.

Structure of the thesis

Chapters one and two focus on developments in news media since the end of the Cold War and their impact on genocide and genocide prevention. Chapter one serves as a review of the existing literature on the ways in which modern media relates to genocide and genocide prevention. Two main theories on policy-media relations in Western

democracies are examined: the theory of "manufacturing consent" which holds that governments generally manipulate the media; and the theory of the "CNN effect" which argues that the media is more likely to influence government. It assesses, through the literature, the role of the media in various genocidal episodes, including the Iraq–Kurdish crisis, the Rwandan genocide, the war in Bosnia and the current genocide in Darfur. The commonly recognised challenges facing modern media in times of genocide are reviewed, as well as the possibilities for progress towards prevention.

Chapter two examines in more depth the critical issues arising from the profusion of new media. It analyses the increase in "citizen journalism": a phenomenon which sees news and video footage being gathered by amateur individuals and then often disseminated on communication fora such as YouTube and Facebook. This phenomenon is increasing in conflict-ridden areas and is linked to traditional news media's growing reliance on visual images. This chapter examines the media "arms race" which has developed between governments and their peoples. First is the *domestic arms race* which involves the use of the media to mobilise both *genocidaires* and internal resistance to genocide. Second is the *international arms race* which includes the use of media to document atrocities to obtain foreign assistance, as well as to disseminate misinformation. The international media arms race also includes a three-way contest between the international public, their governments and the media. While the literature thoroughly examines the theories of manufacturing consent and the CNN effect, it has neglected to examine the potential for media to be influenced and directed by the people. This "grassroots influence" media is examined in relation to the popular "free Tibet" movement.

Chapters three and four examine the impact of climate change on genocide and genocide prevention. Chapter three takes for granted the virtual scientific consensus on the reality of anthropogenic climate change (Intergovernmental Panel on Climate Change 2007). There exists little scholarly literature on climate change and genocide. This section therefore reviews the extensive literature on climate change and conflict, incorporating some of the broader arguments about resource scarcity and violence. Based on this literature, the chapter argues that climate change likely enhances the risk of genocide.

Chapter four examines the relationship between climate change and the doctrine of the Responsibility to Protect (R2P). The R2P doctrine holds that if a state proves incapable of protecting the lives of its citizens, the international community has a responsibility to take on this role. Preventative measures are stressed under R2P but are often ignored in academic or policy discussions in favour of military intervention. Given that the symptoms of climate change are likely to enhance the risk of genocide across the globe, it is time now to refocus this discourse and re-examine R2P as the most obvious mechanism through which to prevent climate change related violence. This chapter looks at how R2P could be effectively expanded in this way. It argues that, rather than weakening the doctrine, such a redirection would in fact strengthen its standing as an international norm.

The analyses of modern media and climate change and their respective impacts on genocide and prevention converge in Chapter 5. Here it is argued that the literature on genocide prevention focuses almost exclusively on the immediate causes of genocide, those likely social or political factors which tip an already troubled nation or region into committing atrocities. The author claims that this limits the effectiveness of prevention

both in the short and long term. The focus should instead be on those "upstream" factors which trouble a nation or region in the first place. This section explores the use of technology for upstream prevention, including media and environmental protection but also economy and infrastructure, the promotion of democracy, education and health care. It explains that an understanding of climate change is one of the most effective means through which to determine when, where and why genocide and mass atrocity crimes will occur well before they do. It also outlines the ways in which modern media can be used as an "upstream" prevention tool for these situations.

The thesis conclusion reviews the preceding chapters on media and climate change and their impact on prevention and concludes that the use of technology can influence whether or not genocide occurs and that it can be harnessed for prevention. The thesis thus suggests future research pathways in the area of technology use and genocide prevention.

Chapter 1: The literature on modern media

Introduction

The power and role of the media in relation to foreign policy are much debated. Some believe the media to be capable of prompting policy-makers to launch a military intervention in times of genocide. Others see them as being far less influential and believe that news coverage and commentary is more likely to have no significant effect. Still others accept the potency but point out that it is vulnerable to manipulation by its own government or by foreign *genocidaires*. This chapter offers an overview of the general theory on the influence of the media. It also analyses the genocidal events in Iraq, Rwanda, Bosnia and Darfur, with particular focus on the extent and quality of the media coverage of each crisis, how the victim group and its attackers were portrayed and whether there was a consensus among political powerbrokers regarding intervention policy; together with consideration of the ways in which policies were influenced by the media.

This chapter's analysis is restricted mainly to Western democracies, primarily those which have engaged in an intervention mission in the last 30 years. It is, however, important to pay some attention to the media *within* a genocidal state, and this is also briefly explored in relation to the Rwandan genocide.

The media have long been in a state of evolution. From the 1980s onwards, however, the pace of change quickened dramatically. "New media", or digital media, have radically reshaped the way news is reported (Lister et al. 2009:10). According to Flew, a "combination of...computing and information technology (IT), communications

networks, and digitised media and information content converged to form 'new media'" (2008:2). As technology improves, so too does the media's ability to cover a story with greater detail and immediacy. Visual images and live footage have become the primary means of coverage and these are arguably more emotionally powerful than the written word. Indeed, in his book "The Assault on Reason", Al Gore points out that "...the visceral vividness portrayed on television has the capacity to trigger instinctual responses similar to those triggered by reality itself—and without being modulated by logic, reason, and reflective thought (2007:19).

The rapid developments in the form, quality and pervasiveness of the media have also meant a change in the relationship between it, national governments and the general public. Numerous questions arise. Do the media now shape the value system and priorities of the people and the policy objectives of the government, or vice versa? Do journalists entirely dictate to the public the ideas, attitudes and responses they believe are essential, or do the media only present what the public wants to see and hear and already believes?

Within the potentially *intervening* state, there exists a complex, and sometimes very subtle, relationship between the media, the government and the public. This circular influence-based relationship structure is affected by information coming from the people and the media within the *genocidal* state, as well as from its government. The relationship between the media of the genocidal state, its people and its government is very different and far less subtle. The genocidal government may be using the media as a political tool and there may be very little journalistic dissent. This may have come about because there is a great deal of journalistic dissent and support for the victim

group prompting media suppression by the government, or because the media and the government are on the same side.

Two main theories exist regarding policy-media relations in Western democracies. They are defined by the perceived strength of a specific actor. First, there are some instances in which the media have only limited influence and can be manipulated into supporting government policy. This theory was entitled "Manufacturing Consent" by Herman and Chomsky (1988). The theory of *Manufacturing Consent* holds that the government is stronger and is able to manipulate the media. This theory predicts that the outcome of government-media interactions regarding genocide intervention will depend on how policy-makers felt about intervention prior to news coverage.

Other analysts later observed that there were instances in which the media could influence government. This was entitled the "CNN effect" or "CNN factor". Coined during the 1991 Gulf War, it refers not only to CNN but the news media in general. In these cases, media coverage can significantly shape a nation's decision to intervene in a humanitarian crisis (Gilboa 2002:733, Robinson 2002:2). The *CNN effect* sees the media as the strongest player in certain situations, capable of influencing government decisions. Here, the result will be determined by the position of the journalists and the way in which they present the situation. The public is also influenced by these journalists and is thus able to mediate to a certain extent.

According to Robinson, there are factors which significantly affect the extent of the media's influence. Whether or not an administration possesses a pre-existing policy regarding intervention is important. According to Robinson, policy certainty exists when there are strong concerns regarding national interest. When this involves a policy

of non-intervention, the media are powerless to persuade the government to intervene. The media can bring about an intervention only when there exists policy *uncertainty* – when there is no executive policy or when policy-makers are divided as to the appropriate course of action – and when the media are clearly critical of the lack of action and obviously sympathise with the suffering people. When the government is certain of its policy, it appears that not even critical and sympathetic media coverage can change its decision (Robinson 2000). When there is *no* policy, it is likely that policy-makers will feel pressured to respond to critical media coverage or else face a public relations crisis and a loss of voter confidence (Robinson 2002:32). When a decision to intervene has already been made, it is likely that the executive will use its "substantial resources" to try to influence the media. The media may then *follow* the decision made by the executive. There may still be criticism of government policy, but this appears only to arise when there exists "elite dissensus over policy". When there is consensus among politicians, media coverage reflects this consensus. News reports remain uncritical of government policy (Robinson 2000).

The manner in which a story is covered is also significant. Journalists can choose to write emotive reports which focus on the plight of a specific group, presenting its members as individuals with whom the viewing public can identify. News coverage which empathises with the suffering people and criticises government inaction is defined by Robinson as being "critically framed". If policy-makers have no clear intervention policy with which to counter this kind of media coverage, they may be forced to respond to "media driven public pressure or the fear of *potential* negative public reaction to government inaction" (Robinson 2000). Critically framed media coverage might thus prompt intervention. When it *can* change policy, Robinson believes

that media coverage can cause air power intervention but not the deployment of ground troops and that this was demonstrated in Bosnia (Robinson 2000).

Conversely, some kinds of news coverage can act as an intervention *deterrent*. A prime example is the situation in Somalia in 1993 and the resulting media coverage, which impacted America's attitude to intervention long after the crisis had ended. While attempting to capture the Somali warlord General Mohammed Aideed, two US helicopters were shot down. In the firefight which followed, 18 Americans died. The body of one was dragged through the streets, an image which was broadcast repeatedly on American television. As Shawcross states, "the effects were momentous throughout the world". Not only were US troops withdrawn from Somalia, the US administration proceeded to withdraw from the concept of multilateralism in general. It distanced itself from the UN and declared that US peacekeepers must never again be party to a conflict. Such an act became known as "crossing the Mogadishu line". Avoiding the crossing of this notional line anywhere in the world became the primary concern of the Clinton and second Bush administrations. The US returned to its 1984 principle of never entering a conflict unless doing so served its national interests and the conflict could be won (Shawcross 2000:101-102). According to Badsey (1997:9), America's "sensitivity" to incurring casualties "is now such as to call into question the entire utility of the United States' massive armed forces (and those of some other NATO nations) other than for home defence or entirely symbolic purposes".

Because of the potentially profound influence possessed by the media, a high level of journalistic accountability and responsibility is required. An optimal ethical code for journalists can be broadly outlined as: striving for truth; avoiding bias; avoiding harm; serving the public; maintaining trust; escaping manipulation; and finally, inviting

criticism and being accountable. Journalists are morally obliged to present the truth to the public. This means including all relevant facts and giving an objective and balanced account of any incident (Klaidman and Beauchamp 1987:30).

Iraq

There is a diversity of opinion regarding the role media played in relation to the US and British intervention policy in Iraq. Power writes that the media influenced government, Robinson and Wheeler disagree.

Long before the 1991 military intervention in Iraq, news reports were broadcast by the Western media which highlighted and sympathised with the suffering of the Kurdish people. Immediately after the Halabja gas attack of 1988 – the worst of the Iraqi chemical assaults, which killed 5,000 civilians – post-genocidal coverage of the carnage began to emerge. In March, it was a front cover story in both the *Washington Post* and the *Los Angeles Times* (Power 2003:191). The word "genocide" was commonly used by journalists and editors to describe the event (Power 2003:218).

Even so, Western governments had long dismissed the idea of forceful intervention in Iraq. In 1991, this decision was reversed within a matter of days (Shaw 1996:156). There is disagreement over whether or not this was the result of new graphic images of Kurdish suffering in the north.

The US Operation Provide Comfort, launched during the aftermath of the 1991 Gulf War, involved both air power and ground troops. The official reason for the deployment was to protect Iraqi Kurds in the north, hundreds of thousands of whom were fleeing the

retribution of Iraqi authorities following armed Kurdish and Shi'ite uprisings. As there had been policy certainty *against* intervention during these uprisings, it is commonly held that it was the media coverage of the later Kurdish humanitarian crisis which led to US intervention and the establishment of "safe havens" (Robinson 2002:63,64). Many believe that "this position [of non-intervention] became untenable as the media – especially television – pinned moral responsibility on Western leaders for their abandonment of the Kurds after inciting them to rise up and overthrow Saddam Hussein". It is believed that John Major and George Bush both realised that inaction would be viewed as unacceptable by the public and that their political standing would be threatened. According to this belief, intervention became politically expedient (Wheeler 2000:165).

United States news coverage of the Kurdish crisis was "intensive". Before US ground troops were deployed, the *New York Times* published over six articles a day, while the *Washington Post* published almost four a day. The situation constituted headline news almost every day on ABC, CBS and NBC. This coverage emphasised the suffering of the Kurds and either explicitly or implicitly demanded action (Robinson 2002:67,68). According to Power, Kurdish refugees "poured out their stories to journalists" and these eventually drew the attention of the U.S. Secretary of State (2003:201). Major claimed that it was his personal reaction to the images of Kurdish refugees which led him to choose the option of creating safe havens. It is supposed that Bush was then persuaded to overrule the Pentagon's advice and support the British and EU safe haven initiative (Wheeler 2000:165,166).

Despite this common perception, neither Wheeler nor Robinson believes this to be a complete explanation. Military deployment was not the only response available to

growing media pressure. Major could have chosen to "ride out the storm of media criticism". The path of intervention was politically risky and the establishment of safe havens was very complex, both legally and operationally. According to Wheeler, the intervention had more to do with the passing of Resolution 688, which provided "legitimating arguments" for the legal establishment of safe havens and no-fly zones (2000:165,166). Wheeler believes that without this resolution, intervention in Iraq would have been viewed as a violation of the UN Charter. Robinson is in agreement, claiming that media coverage served to *enable* policy-makers, who had already decided to intervene for "non-media-related-reasons", by creating public support for the intervention (2002:71). Given the unusual strength of force of the operation, this explanation seems likely. It appears to be primarily a case of "manufacturing consent". Indeed, Badsey (1997:12) states that "the American government, before it felt confident enough to employ military force against Iraq, had needed to create not just an international consensus but a suitable domestic environment by exploiting the media to influence public opinion".

Rwanda 1994

Media coverage of the 1994 Rwandan genocide was extensive. By the end of April, it had attracted significant and constant media coverage in the US – although not blanket headline coverage. It featured several times as the front cover story of both the *New York Times* and the *Washington Post* and was mentioned many times on CNN, ABC, CBS and NBC news bulletins (Robinson 2002:71). Around this time, the first images began to emerge of thousands of mutilated bodies floating down the rivers of Rwanda, as well as of the "human exodus" of up to half a million people trying to flee to safety (Wheeler 2000:225). The UN force commander in Rwanda, Romeo Dallaire, recognised the importance of the media in prompting stronger intervention. He claimed that a

"reporter with a line to the West was worth a battalion on the ground" and he actively encouraged and facilitated the filing of news reports (in Power 2003:355). So, why did Western intervention in Rwanda prove to be too slow and inadequate? The answer may lie in the fact that there existed a significant level of policy certainty regarding non-intervention which helped to mitigate any media influence. This was particularly strong in the US as a result of the Somalia crisis (Robinson 2002:111).

The lack of effective intervention may also be due to the way in which journalists portrayed the crisis. Many journalists believed the common myth – and the Rwandan government's official line – that the violence was caused by ancient tribal animosity, which implied that international intervention would be inappropriate or useless (Power 2003:355, Omaar and De Waal 1995:251, Schimmel 2011:1126). This type of news coverage is described by Robinson as "distance framing". The media failed to reveal the true nature of the killings, instead presenting them as part of "a breakdown in a ceasefire and/or as part of a regular round of tribal bloodletting". This "inhibited serious attention to the crisis from both policy-makers and the broader public" and "implicitly supported a policy of non-intervention" (Robinson 2002:114, 115). Omaar and De Waal agree that the inadequate political analysis presented by journalists had a detrimental effect regarding intervention (Omaar and De Waal:255).

To "get the story right", Schimmel argues, the media would have needed to challenge the government's presentation of the genocide as tribal conflict, seek out alternative sources of information and "critically engage the government on an ongoing basis in pursuit of the truth" (2011:1127). But perhaps what also was needed was a more fundamental shift in perceptions in order to see past anti-African prejudice. According to Wall (1997), the reason for the inadequate reporting on the real causes and nature of

the genocide was the media's reliance on pejorative stereotypes of Africans and their inherent tendency for tribalism, violence and irrationality.

The fact that the media engaged in "self-censorship" posed a further challenge (Schimmel 2011: 1127). Graphic images and details were reportedly suppressed as they were considered too shocking for the viewing public. The reports were thus sanitised and made more palatable to the supposedly sensitive Western viewers (Schimmel 2011:1127). Schimmel claims that this was not only a problem during the Rwandan genocide but is one constantly faced by the media. Decisions are made every day as to how to minimise the shock to audiences and show respect for victims of violence and the dead, while fulfilling the responsibility to report fully and honestly (Schimmel 2011:1127). Other media commentators have confirmed this tendency to be selective when reporting violence in the developing world. As Chouliaraki states, "Distant misfortunes are subject to the strictest of restrictions … on what is reported and how, so as to minimize the disturbing impact of such misfortunes on spectators" (2006:111). Whether or not this view conflicts with those who argue for the existence of "compassion fatigue" in media-public relations will be discussed in the next chapter.

Other journalistic pressures contributed to a lack of information. At the time of the genocide, the triumph of Nelson Mandela was the main news story from Africa and the major newspapers and news corporations were unwilling to divert their journalists to focus on Rwanda. It was believed that most readers and viewers knew little or nothing about Rwanda and so it would not make a profitable story. Initially, the international press focused mainly on the plight of foreigners. Journalists were only prepared to travel with international troops who were evacuating foreigners or interview evacuees arriving at European airports. Because of concerns about security and the problem of

access, there were no journalists in the rural areas reporting on the massacres there. The regime managed to conceal the rural genocide from the outside world for almost three weeks. It was only when refugees started arriving in Burundi that the international media first began to realise the scale of the crisis (Omaar and De Waal 1995:253,254). By this time, three weeks into the genocide, approximately 250,000 Tutsi had already been massacred (Schimmel 2011:1127). Journalists also relied too heavily on reports from foreign aid workers in the country who were usually not well-informed of the whole situation (Omaar and De Waal 1995:252).

As Thompson states "From 6 April until the middle of May, when the bulk of the genocide took place, Rwanda was still relegated to the inside pages of most newspapers … the photos that were published were small and often old, the accounts second-hand, with little if any news appearing for days at a time" (2007:4). Thompson points out that a media image had contributed to the US withdrawal from Somalia – that of an American marine being dragged through the streets of Mogadishu – therefore, the lack of media images from Rwanda a year later probably helped those power brokers around the world who did not want to launch another intervention in Africa (2007:5).

It is vital to also examine the *Rwandan* media and its impact on intervention. The government undertook a campaign involving the dissemination of murderous propaganda and the silencing of all dissent. The killing of independent Rwandan journalists by the extremist Hutu regime affected the world's understanding of the situation and thus the likelihood of intervention. The aim was to create confusion so that neither the majority of Rwandans nor foreigners knew what was happening. This would prevent information about the extent of the killings becoming known, make any attempt

at escape difficult and prevent news of the genocide from reaching the outside world. This strategy proved highly successful (Omaar and De Waal 1995:236).

Propaganda from two radio stations ignited and maintained the genocide. Both Radio Rwanda and RTLM told listeners that the Tutsis planned to exterminate the Hutu population (Omaar and De Waal 1995:236). During the genocide, RTLM was entirely devoted to maintaining the "war against the Tutsis" (Omaar and De Waal 1995:161). Listeners were urged to arm themselves with any weapons at their disposal (Eltringham 2004:67). Listeners were encouraged to call in and suggest places where Tutsis might be hiding. Radio Rwanda was equally focused on openly encouraging and maintaining the genocide (Eltringham 2004:116,164).

According to Robinson, "the case of non-intervention in Rwanda is not indicative of the shallow and minimal impact of the media…but rather is suggestive of the minimal impact of a particular form of coverage, that of distance framing". He also states, however, that even had coverage been "empathy framed", its influence on policy would still have been minimal due to the high level of uniform non-intervention policy certainty at the time (Robinson 2002:116). Wheeler, however, points out that, as media coverage of the genocide grew, and the scale of the atrocity became apparent, the Security Council reversed its earlier decision and agreed to deploy a larger force (Wheeler 2000:209). The failure of the media during the Rwandan genocide negated the possibility for protests or for demands for governments to do more to stop the violence. It left the way open for the *genocidaires* to continue their killing. Had journalists been more accurate or investigative from the outset, a more effective intervention may have been deployed sooner.

Bosnia 1994/1995

The media appears to have played a crucial role in prompting intervention in Bosnia. As Holbrooke states, "the reason the West finally, belatedly intervened was heavily related to news media coverage" (1999:20). This coverage happened to operate in conjunction with policy *uncertainty* in the US executive as to whether or not to intervene (Robinson 2000). This appears to be why it was able to have an impact which was, ostensibly, so powerful.

The Bosnian genocide stands out from many others because it was so highly visible. Cushman and Mestrovic claim that, "never has genocide been covered so much and so well". There were many foreign journalists based in Sarajevo reporting the events as they occurred (Cushman and Mestrovic 1996). The policy-makers of the West were thus aware of the atrocities that were unfolding.

Following the fall of the "safe area" of Srebrenica to the Bosnian Serb Army in 1995, the US intervened to defend the Gorazde "safe area" from the same fate. Between the fall of Srebrenica and the US threat to use force two weeks later, there were high levels of media coverage. The taking of Srebrenica featured many times in the *Washington Post* and the *New York Times* and was treated as a leading headline story by CBS (Robinson 2000). The news bulletins focused on the extreme suffering of civilians and were also critical of Western policy (Robinson 2002:78). Because they both *emphasised* the failure of the West and *empathised* with the refugees, they encouraged action. Also, this critical coverage coincided with policy uncertainty as to whether or not further violations of UN safe areas, particularly an attack on Gorazde, should justify the use of force. It appears, then, that a strong CNN effect was present which influenced the decision to defend Gorazde (Robinson 2002:82,83).

There were, however, limits to this influence. Much of the media called for the deployment of ground troops in Bosnia in order to protect the safe areas. It was not successful in persuading Western governments to do this (Wheeler 2000:300). According to Robinson, this indicates that the media have far greater influence over air power intervention – a form which is both economically and politically less costly – than ground troop intervention (Robinson 2002:123). The success of the air attacks when they were eventually deployed, however, suggests that ground troops were not required – something which the government would arguably be in a better position to judge than the media.

The bombing of a Sarajevo market place in February 1994 is another example of where "critical and empathy-framed" media coverage coincided with policy uncertainty and thus prompted a decision to threaten air strikes against the Bosnian Serbs. The footage of the aftermath of the bombing was extremely graphic, critical, empathetic and pervasive and, within four days, the Clinton administration had presented the Bosnian Serbs with an ultimatum: stop shelling Sarajevo or face air strikes (Robinson 2002:86,90).

It has also been claimed that the UN forces in Bosnia were able to use the media to strengthen the peacekeeping mission. The British Army introduced an unofficial convoy system for journalists which gave them a degree of military protection. This was because UN commanders found that they could use television footage taken of events such as local ceasefire agreements as a permanent record with which to deter violators. With the international community acting as witness to such agreements, signatories would be less likely to violate the terms and risk international condemnation. The threat

of media exposure proved highly effective. As the Canadian Major-General Lewis MacKenzie of the UN Protection Force (UNPROFOR) later stated, the media was "the only major weapon system that I had" (Badsey 1997:19).

Journalists took a pro-active role during the Bosnian War. They often reported stories which they hoped would prompt Western policy-makers to act. In 1992, images of starving Muslim men behind barbed wire "inflamed public outrage about the war". Producers of ITN news admitted to deliberately using footage which would remind viewers of the Holocaust. In July of that year, it was recorded that 45 per cent of Americans objected to US air strikes and 35 per cent supported them. After this footage was aired, and with no advice from their political leaders, these figures changed, with 53 per cent approving and 33 per cent disapproving. Approximately the same percentage endorsed the contribution of US troops to a "humanitarian or peacekeeping mission". The plight of Muslim prisoners was not previously unknown but, as Power points out, "popular interest and sympathy were aroused by pictures far more than they had been by words" (2003:276). In the Netherlands, these images caused a "morally based crusade" for military intervention (Ruigrok 2008:293). The Holocaust analogy was repeated in newspapers across America. While some may have objected to this comparison (Power 2003:277), it was an effective means of highlighting the severity of the situation.

According to Power, the Bosnia coverage raises the question as to whether or not atrocities are portrayed differently in the media according to their location and the ethnicity of the victim group. She claims that, "however disturbing viewers and readers found images from prior genocides, there was nothing quite like their discomfort that such horrors could occur again *in Europe*" (Power 2003:277). The way in which

journalists chose to portray the situation in Bosnia does indeed appear to differ markedly from their portrayal of the events in Rwanda, a crisis which undoubtedly constituted genocide but was reported as being the result of irreconcilable tribal differences. The coverage of the Darfur genocide, however, demonstrates that news reports of an African crisis can be just as empathetic, as least as far as individual victims are concerned.

Darfur (2003 – present)

The case of Darfur is evidence that Western media have portrayed Black victims in a humane and personal way, to which White viewers and readers can relate. Although now less frequent, news coverage of the Darfur genocide has mainly been thorough and of a high quality. This is perhaps because it has had a long time to develop – the atrocities have been continuing unimpeded for years.

The foreign press has examined Darfur from many different angles. It draws its information from the reports of the UN and many different aid organisations, interviews with aid workers and refugees, the opinions and analyses of experts and academics as well as eyewitness accounts by the journalists themselves (Reeves 2005, Sudan Watch 2005). Statements from the government in Khartoum and foreign governments such as that of the US, Britain and Australia are also documented. In order to emphasise the severity of the situation, the articles draw comparisons between Darfur killings and those of Rwanda. They also point out the similarities of the humanitarian crisis developing in the refugee camps and the situation in Somalia and Ethiopia a decade ago.

Darfur journalism often criticises the lack of action on the part of governments and international organisations. This journalism is also highly critical of the general climate

of impunity. It speculates as to what will happen if this inaction continues (Reeves 2005). In 2004, *Time Magazine* put the Sudan crisis on its cover because, as its editor claimed, "We saw a humanitarian disaster unfolding without sufficient public attention being paid to it. It's a story that has a lot of interesting questions larger than those raised by the conflict itself, such as how the United States defines and responds to genocide" (Ricchiardi 2005).

This investigative, empathy framed journalism is largely the result of a few dedicated individuals who began reporting relatively early in the conflict. In October 2004, for example, a *New York Times* article by Nicholas D. Kristof focused on the traumatic experiences of several children and their families. The story was accompanied by graphic photos. Kristof had to secretly enter Sudan from neighbouring Chad (Dart Center for Journalism and Trauma, 2004). He was one of the first journalists to provide eyewitness accounts of the atrocities. Also in 2004, *Washington Post* reporter, Emily Wax risked her life by travelling across the Chad border into Sudan, hitching rides with rebel soldiers, hiking on foot, scavenging food and sleeping on the ground for weeks at a time in order to reach remote territory and investigate the truth behind the crisis. Wax's stories were highly humanised, in particular her work on Sudanese rape survivors. It is commitment such as this which finally uncovered concrete evidence that the Sudanese government was bombing its own civilians, an act which it had publicly denied (Ricchiardi 2005).

Why has the Darfur coverage not led to more effective intervention? Perhaps because there has been a strong policy certainty towards non-intervention on the part of foreign governments. This, no doubt, has much to do with the Chinese presence within Sudan, which is based on the trade of Sudan's oil resources. The Sudanese government allows

China access to its oil and China, in turn, helps fund the genocidal militias (International Crisis Group 2008). Since 1996, Beijing has been Khartoum's leading supplier of weapons, military supplies and weapons technology (Reeves 2007). China possesses the largest army in the world and a nuclear deterrent. These factors, combined with its position as a permanent member of the UN Security Council and its powerful economic influence across the globe, mean that it is easily capable of reinforcing a non-intervention policy.

The lack of effective intervention might also be due, at least in part, to the discrepancy between Western attitudes towards atrocities committed in Africa and those committed in Europe. This is indicated by the recent advocacy of the theory that there should be an "African solution to African problems". Under this slogan, responsibility for resolving the crisis has been deferred to the African Union (Lebor 2006:188). Would such an approach be countenanced in relation to crises occurring in European countries? It certainly was not in Bosnia. If it is true that there is a level of global resignation concerning violence in Africa, then media comparisons between the Darfur crisis and the violent tragedies which have already occurred in Rwanda, Somalia and Ethiopia will not encourage intervention but will only make the resignation and sense of hopelessness worse.

Media coverage has also waned as the genocide continues. It has been many years since the atrocities officially began and it appears that either the media or the public has lost interest. The situation in Sudan is now rarely in the papers or on the television or radio news. Has the public, and its media, simply grown tired of hearing about another violent African crisis in a seemingly distant and irrelevant country? There is still a certain amount of online journalism regarding the crisis. A prime example is that of Eric

Reeves, academic and Sudan expert, who has established a website devoted to informing the public of the crisis and providing continuous updates (http://www.sudanreeves.org/). This kind of journalism is part of a new media phenomenon, the potential benefits and hazards of which are discussed below.

Challenges and possibilities for progress

Peacekeeping failures may have occurred because there is a lack of understanding of the media by the government and military forces in the US. The government and the military possess a history of viewing the media with a certain level of suspicion and animosity, and vice versa. While the academic world now largely disagrees that the media played a significant part in the loss of the Vietnam War, at the time, the government, the media and the military all believed that it did. This belief has had an impact on American doctrine ever since, with leaders now only accepting short, highly aggressive wars (Badsey 1997:10). It is commonly believed, in military circles, that if an operation is insufficiently forceful and focused from the beginning, then a combination of the international media and the propaganda of the target state will subvert the peacekeeping process (Badsey 1997:21).

The UN does not respond effectively to anti-peacekeeper propaganda, particularly that "promulgated by political authorities in target countries" (Badsey 1997:7). These countries are able to exploit the international media for propaganda purposes, to gain political advantage or subvert a UN peacekeeping operation. In non-democratic countries, the authorities which control the national media use it to extend their power. Through the images of his enemies being dragged through the streets of Mogadishu, General Aideed demonstrated to his own people the power he had over the UN and the

US. This was at least as important as the effect of these pictures back in America (Badsey 1997:17).

The media can also be manipulated to induce an intervention. It has been suggested that this was demonstrated by the Kuwaiti government-in-exile following the Iraqi occupation of 1990. That government engaged the services of a leading American public relations firm and a cover organization "Citizens for a free Kuwait". It manipulated "elite opinion" in the US and six months later had regained its country (Badsey 1997:15). This argument, of course, has to be weighed against the other, and perhaps more convincing, which suggests that America's main concern was freeing Kuwaiti oil from the control of Saddam Hussein.

There are two different areas in which progress can be made. The first of these involves our understanding of the influence of media on foreign policy. We must also improve the accuracy and investigative nature of the journalism itself.

A major restriction when assessing the degree of media influence on policy-makers is that such influence is very hard to detect. Also, measuring policy "certainty" or "uncertainty" regarding intervention may not always be entirely accurate. Reliance on press briefings, for example, may give an incorrect impression of policy certainty. Public support is vital in crisis situations and policy-makers will be unwilling to show any signs of uncertainty (Robinson 2002:135).

According to Robinson, one way to identify the level of policy certainty may be to conduct interview-based research which involves asking policy-makers directly for their assessment of the media's importance (2002:126). This, however, might be difficult due

to security restrictions and the fact that politicians might not like to admit that their decisions were strongly influenced by media reports.

Another option is case study research. Further analysis needs to be conducted regarding the different degrees of CNN effect: when it has a personal effect on policy-makers or influences them via public opinion; when it enables intervention; and when it presents an impediment to action. Research also needs to focus on other factors that might influence intervention decisions, not just that of the media (Robinson 2002:126-128).

The second area in which progress can be made involves the improvement of journalistic practices in times of genocide and mass atrocity. A major problem is that conflict sells; conflict resolution does not. The media, therefore, focuses on extremist positions and the irreconcilable differences of the parties involved. The media generally only cover the conflict during phases of dramatic escalation of violence. Reporting which focuses on conflict prevention is often too abstract to attract or hold the public's attention (van de Veen 1998). Focusing on only the most violent phases of a conflict, as well as the impossibility of reconciliation between ethnic groups, is likely to discourage any foreign intervention.

According to van de Veen, journalists should be "promoters of peace" rather than reporters of violence who promote hopelessness and irreconcilable differences simply because this appears to sell news stories. This role of promoting peace should not be seen as "taking sides", but rather recognising the degree to which journalists are already parties in the conflict they are covering. It is argued that there are various ways in which journalists can help bring warring parties closer to the negotiating table. The Australian NGO, Conflict Resolution Network (CRN), suggests that journalists "avoid simplistic

representations of baddies and goodies" and that they "report areas of agreement as well as disagreement" as this "encourages the problem-solving process to continue" (van de Veen 1998). As Shiras suggests, journalists should "focus not only on the conflict, but also on an array of... strategies for dealing with the conflict" (Shiras 1996:111-112).

It is possible that knowledge of media relations by the intervening force could lead to fewer casualties in future military interventions. Media manipulation is starting to be included in American military thinking. A concept known as "Command and Control Warfare" (C2W) is a method of pre-emptive defence in which a strike is made, either electronically or physically, at the enemy's communications systems, potentially paralyzing its military capabilities without causing mass loss of life. A furthering of this concept is "Information Warfare" or INFOWAR. This idea includes propaganda, computer virus attacks through the internet and media manipulation, to coerce or destabilise an enemy. The issue of state sovereignty, however, is a significant problem here, particularly when these actions are seen as part of UN peacekeeping. Also, this approach would be ineffective against some forms of propaganda such as newsprint or video – the latter being a common way in which politicised sermons are distributed in some Muslim countries (Badsey 1997:13-14).

Conclusion

The media's impact on foreign policy during times of genocide is a complex subject. Two forms of influence may come into play: the government may "manufacture the consent" of the media and use it to gain support for its actions; or, through the operation of the "CNN effect", the media may persuade the government of the necessity for intervention, or even force its hand by making the intervention politically expedient.

The media are sometimes able to take an idea or feeling already present within society and give it direction. The trust a society places in the media means its advocacy of a particular cause gives that cause legitimacy in the eyes of the people. The media are arguably also sometimes shaped by a preexisting feeling within society. This may include a preexisting empathy for, or prejudice against, the people within the genocidal state. It might also include the public's "compassion fatigue" in relation to certain regions or conflicts.

In either case, the press carries a great responsibility. It is capable of selecting which of the many crises occurring around the world at any one time is to receive attention from the public. As Lipstadt points out, if an event is not covered, or is presented in a way that is not easily believed by the readers, it is as if it never took place (1991:116). Intervention in genocide is more likely when the press has roused the public to push government to intervene in an ongoing crisis. The responsibility of the press is not only a question of whether or not it reveals information, but also how that information is presented to the people. The attitude and tone taken by a journalist will convey to the public how important that story is and how it is to be interpreted.

There are clearly also limits to the media's influence. It should not be assumed that journalists always have the power to change a situation. The government may fail to act in a genocide even though it has been well reported. When there is policy certainty as to whether or not to intervene, it appears that media coverage is unable to change this, no matter how critical it is of this policy or how empathetic of the suffering. It is suggested that, even at its most influential, media coverage can prompt the use of air power but not the deployment of ground troops (Robinson 2000). As Wheeler points out, if the

media was as powerful an influence as many believe it to be, Western governments would have been pushed into a greater number of far more risky interventions (2000:165).

The media can be a central element of genocide intervention – either as a motivator and facilitator or as an impediment. It is a constantly evolving element of society and in recent years it has changed dramatically. For these reasons, continuing analysis is crucial if we are to truly understand the relationship between it, the government and the public. The UN does not appear to recognise the value of the media and does not incorporate it into its peacekeeping doctrine. According to Badsey (1997:10) it is critical that academic theory now integrate the role of the media with other aspects of international relations. Without further discussion, there also can be no improvement of journalistic practices during times of genocide, a failure which could have fatal consequences.

Chapter 2: New media arms races and genocide prevention

Introduction

Media have undergone an evolutionary process analagous to that found in the biological world. Biological species evolve in a process known as punctuated equilibrium. When the environment changes, there are bursts of rapid change in which species attempt to fill a new ecological niche, while failure to do so means extinction. Often there are arms races between species, as, for instance, a predator and prey species seek to gain an evolutionary advantage over each other as each increases its speed or teeth or horns. Once a niche is effectively occupied, though, the rate of evolutionary change diminishes radically, giving rise to stable, differentiated species (Gould 2002). This pattern explains the reason that intermediaries between different species are exceedingly rare. Fossil remains of many individual specimens *Homo erectus* have been found. This species likely preceded *Homo sapiens* and is remarkably similar in many respects except for brain size and capacity for language (Walker and Shipman 1996). No example of the link between the two species, with an intermediate brain size, is known to science because the evolutionary jump occurred in a geological instant, while each species persisted for hundreds of thousands of years.

Punctuated equilibrium also describes the evolutionary pattern of communication and media. The primary driver of evolutionary jumps is technological innovation. The inventions of writing, the printing press, radio, television and more recently the internet and mobile phones with cameras have each brought substantial change to the way that humans communicate with each other. Social and political changes have also driven

some changes in media, though these tend to be gradual, such as increasing literacy rates.

A period of equilibrium in the media environment may have started shifting with the end of the Cold War. The advent and rapid update of a number of reinforcing technological innovations including the internet and cell phones with cameras precipitated a leap in the structure and dynamics of the media landscape which is ongoing. The previous media paradigm, reliant on television, radio and print, enforced a sharp distinction between media producers and consumers. Previously, communications were directed out from a small group with vastly disproportionate control of content. "New media" is a 21st Century catchall term encompassing new technology which has proliferated in the last 20 years and the new socioeconomic structures and social habits. One of the most significant features of new media is an increased dependence on the visual image and live footage. Perhaps even more importantly, new media blurs the distinction between producers and consumers. Widespread capacity to produce the news might be called "citizen journalism", which is changing the power dynamics of groups which use media. Implications for genocide prevention are potentially profound. However, ongoing contests for power have not yet played out.

Media's new relationship with genocide will be largely decided by the outcome of two related "arms races". In countries at risk genocide or other mass atrocity crimes, the primary contest is between potential *genocidaires* and potential victims, with each group vying for control of new media for its own advantage. The international contest is more complicated, with both potential *genocidaires* and potential victims trying to influence public opinion and government policy worldwide, external governments pursuing their own agendas and with both competition and cooperation between

traditional and new media as each tries to establish and expand its new niche. Interests in the international arena are not mutually exclusive between all parties.

From old to new media – how the news has changed since the Cold War

Print media are declining around the world. The industry is attempting to develop new digital products and new revenue streams to transition from dependence on print advertising as its audience transitions to internet usage for its news. In 2011, print advertising in America declined for a sixth consecutive year (Edmonds et al. 2012).

Traditional media

Apart from the technology involved, two characteristics of traditional media distinguish it from new media in ways important for genocide prevention. The structure of traditional media concentrates the production of news in the hands of a tiny minority, while the consuming majority have little direct input into what they watch. The flow of information is unidirectional and comes from a small number of sources subject to bias or interference. Most obviously, state-controlled media with an interest in a story may broadcast only a particular view of it, due to its capacity to maximise or minimise awareness and impact through the prominence or superficiality of its presentation. The same is true of major news corporations with political or other biases.

Traditional media relies on a small number of reporters, making it easier to disrupt, potentially preventing or diminishing reporting of a conflict. The importance of visual images for modern news media means that journalists are often working in the midst of the fighting on the front lines of a crisis. Combatants attack journalists in an attempt to kill them or scare them from the country, thus eliminating powerful witnesses. Between

1992 and 2011, some 852 journalists were killed while carrying out their job. In 2009 alone, 77 journalists were killed. In 2010, 44 were killed (Armoudian 2011:306). There are a number of possible results. First, this may draw even greater attention to the crisis. A country will become more interested in an event if its own nationals are being killed. Second, journalists might stop visiting, and thus reporting on, the crises which are known to be the most dangerous for those of their profession. If this occurs, the crisis will vanish from the news and there will be no hope of preventative action. Third, journalists might join a "press pool" for safety. This involves journalists grouping together and cooperating, often with the protection of a military force such as UN peacekeepers. While this can be a safer way of operating for the journalists, it can also result in more limited coverage of the crisis because their movements and observations are restricted. Following the Gulf War, journalists stated that this system had meant that they were intentionally fed only certain pieces of information and had thus been manipulated and exploited by the government and the military (Badsey, 1997:12). The dangerous conditions in Bosnia and Croatia in 1992, however, led to a revival of the pool system as a means of protection (Badsey, 1997:19). Press pools are also likely to exacerbate "pack journalism," in which journalists tend to write about the same stories in the same way (Ruigrok 2008:296). It can also mean that a bias develops in the work of the journalists because they are generally only seeing and hearing what the soldiers who are protecting them want them to see.

The second characteristic of traditional media with importance to genocide prevention is that much of it is run for profit. Traditional media is big business, with individuals amassing large empires. This profoundly impacts what is produced and disseminated to the public as news. Media corporations receive funding through the sale of advertising. The operating principle is to appeal to an audience with demographics attractive to

advertisers (Moeller 1999:10). Armoudian also believes that media content is designed to attract the biggest audience and sell advertising to other large corporations, even if that means disseminating disinformation masked as journalism (2011:298). Journalists often must bypass stories of importance for those that sell – they must reach for the "lowest common denominator". With journalists constrained by corporate goals, this cannot be described as "free media" (Armoudian 2011:2).

New Media

Citizen journalism

One major change in news media since the end of the Cold War is the rise in what might be termed "citizen journalism". This involves individuals other than professional journalists – amateur citizens – collecting information and images and either providing these to media corporations or broadcasting the material themselves on social forums such as YouTube and Facebook. Citizen journalism, and the social media forums on which it is often disseminated, is increasing in various conflict-ridden regions.

Reliance on images

Media are increasingly reliant on the use of images and live footage. Since the first introduction of television and on-the-ground reporting, the use of live footage has increased and it is now relied upon to do much of the story telling. For television news broadcasts, audiences are lured in with cinema preview-like snippets. These snippets, of conflict, natural disasters, famous faces, are picked for their awe-inspiring nature or ability to spark greater interest in the viewer (Moeller 1999:37). Satellite technology and global connectivity has also improved, meaning that images can be broadcast to the world instantaneously and audiences can watch events as they happen.

Visual images have a greater emotional impact on audiences than does the written or spoken word. This impact could mean a greater potential for genocide prevention because the international community is emotionally moved to act; or, as discussed later, it could lead to the global audience becoming overwhelmed and "shutting off" their feelings of compassion, thus resulting in a reduction of preventative action. As Moeller states, "more graphic is not better" when it comes to conveying information on violent crises because most people recoil from horrific details in the news and their attention is lost (Moeller 1999:318).

News corporations' focus on visual images means that crises for which there are no images are largely ignored. If no images are yet available, a crisis is unlikely to make the front page of the newspaper, let alone the evening news. Indeed, sometimes stories will be "shelved" until there are pictures to accompany them, or thrown out altogether (Moeller 1999:37,38). The increasing reliance on images to present the story to the public also means that there is often less intellectual analysis of the events which have unfolded than there would have been had the story been presented in print media.

Domestic arms race

Mobilising genocidaires

Large-scale genocide normally requires motivation and coordination of a large number of perpetrators, whether these act in highly specialised roles as in Nazi Germany, or if many of those involved directly participate in killing, as in Rwanda. With its reliance on images, new media can help create the hatreds required for genocide. Already across the Middle East, political and religious figures are beginning to recognise social media's potential to promote their own agendas. Some government officials and politicians are active contributors to social networking forums. For example, in the lead up to the

Egyptian presidential elections of September 2011, supporters of Mubarak's son Gamal utilised it effectively, creating many internet groups to forward their cause (Ghannam 2011:21). While this has not yet been used to promote genocide, the potential is there. Nevertheless, introduction of new media probably offers only a marginal enhancement of this government capacity to motivate genocide compared with old media.

The powers of new media are not limited to inflaming passions. It can also be used to coordinate individuals. However, in a context where traditional forms of media are already doing this, as in the case of radio broadcasts coordinating genocide in Rwanda, improvements to top-down coordination are likely limited, even if the centralised controllers are better informed due to the improved two-way communication that new media provides. In short, new media does offer some advantages for would-be *genocidaires* but it increases their power only marginally beyond what they could exercise through traditional media.

Mobilising resistance

Propaganda can be important for gaining a population's acquiescence and endorsement of genocide. The propaganda campaign worked in Nazi Germany for four reasons: "dire social and economic conditions in Germany, a simple but corrosive web of misinformation, emotional appeals, and a pervasive and authoritarian message and ideology that blossomed and grew through control of mass media and public space" (Armoudian 2011:57). The introduction of new media increases the plurality of voices, inhibiting uniform propaganda. New media presents opportunities for minorities unable to control traditional media to communicate with the rest of their society. Ghannam (2010:6) believes that, in the Arab region, "the days of government-sponsored or politically allied newspapers having a media monopoly have been eclipsed by the

advent and adoption of social media, particularly in countries such as Egypt, the leader in social media activism just by sheer numbers alone…" There seems to be an increasing desire to communicate and a growing availability of the required technologies (Ghannam 2010:6). New media also enhances potential for communication between different groups, such as ethnic groups, and so carries with it the potential to decrease stereotyping.

The knowledge that citizen journalism exists might also cause combatants to hold back from committing certain atrocities for fear that someone with the ability to broadcast the images will be watching. Conversely, this fear might simply cause perpetrators to more thoroughly plan the atrocities they are going to commit so that they will remain concealed from the public eye for longer, possibly resulting in more death and a decreased chance of prevention. In the face of genocide, new media can also be used to coordinate resistance or escape.

Government fights back

Repressive and genocidal governments will respond to the resistance movement's use of new media. Authoritarian regimes have posed many challenges to the advancement of internet freedom, particularly in the Middle East during the "Arab Spring" uprisings. Governments have attempted to shut down the internet in some countries or block usage by putting up firewalls. Citizens have responded by using proxies or other means of bypassing these firewalls. This has been met with further government blocking (Ghannam 2011:4).

Expressing one's opinion online in the Middle East is risky. Hundreds of Arab activists, writers and journalists have faced violent repercussions due to their online activities.

These repercussions have included torture and imprisonment. Countries in which this is particularly problematic include Egypt, Libya, Syria, Saudi Arabia and Yemen (Ghannam 2011:4,8).

Facing a popular uprising, on January 28 2011, Mubarak cut nearly all Internet access in Egypt. The news channel Al-Jazeera was banned in Tunisia on several occasions and its offices closed. The Zein Al Abidine bin Ali regime only allowed private television stations to operate under indirect state control (Harb 2011).

Mubarak's Internet blackout in Egypt was, however, incomplete and encouraged effective and innovative technology solutions on the part of activists. As Stepanova points out, some of these included "utilizing router/path diversity methods, IP proxy servers, and Google voice-to-Twitter applications" (2011). This suggests that attempts at social media repression will ultimately do nothing but enhance its capability.

Both China and Iran sought to control the flood of internet images emanating from the Middle East during the Arab uprisings. Chinese authorities "clamped down hard" after calls for a "Jasmine Revolution" in China modelled on the Arab uprisings. Suspects were quickly detained and online calls to hold protests in Beijing, Shanghai and other major cities were censored (Cottle 2011:655). The influence of the Arab uprisings in China demonstrates the "intensification of communications within today's political geography as their impacts move outwards as powerful ripple effects to repressive regimes and democracies with vested interests around the world" (Cottle 2011:655).

The outcome of the arms race between repressive regimes and victim groups will likely hinge on the sophistication of governments' use of media. Some governments' capacity

to use new media is reliant primarily on the use of Western commercial technology. They are unable to create a parallel version of the internet, selectively block large portions of the internet or shut down mobile phone communication. New media developed in the West, such as the Twitter website, has a focus on enhancing peer-to-peer communication and does not facilitate top down interference by governments. This means governments are just one voice using new media among many, potentially outnumbered by dissidents including expatriate communities and NGOs. In these contexts, new media will likely substantially advantage dissidents and potential victim groups. In places where the government is sophisticated in its use and control of new media, like China, new media may offer dissidents some advantages compared with traditional media. However the benefits to those who are repressed are much smaller.

International media arms races

At the international level, a number of interacting arms races are occurring as different parties seek to expand or maintain their level of influence, shaping foreign policy decisions. Both potential *genocidaires* and their victims seek to control new media in an effort to shape and influence the reactions of the outside world. Simultaneously, traditional and new media compete for market share at the same time that they seek to harness the power of the other. The prize in both these contests is the attention and sympathy of the international public. Once its sympathies are aroused, the international public must contend for influence over both traditional media and their respective governments. Each of these three parties exerts influence over foreign-policy and efforts to prevent or intervene in mass atrocity crimes.

***Genocidaires* v. victims**

Documenting atrocity and obtaining foreign assistance

The use of new media can be an important tool for victims, or potential victims, of mass atrocity crimes to gain the attention and assistance of the outside world. During the early days of the uprisings and military crackdowns in Libya, journalists were banned from entering the country. Images of attacks on rebel forces by Libyan heavy armour were circulated on YouTube and incorporated into mainstream news media. News was disseminated despite the absence of foreign correspondents on the ground (Cottle 2011:656).

Diasporas may prove a critical bridge between victim groups and the rest of the world. Based on her own observation, Harb declares that, during the period 25 January to 12 February 2011, the use of social media forums such as Facebook and Twitter changed significantly. They "shifted from being merely social in nature to becoming rapidly and *primarily* political, not only among Arab users in the Arab world … but also throughout the Arabian diaspora" (Harb 2011). Harb concludes that the nature of social media has meant that the diasporas of the countries concerned have been instrumental in the success of the uprisings back home (2011).

Misinformation

It is not guaranteed that those recording and broadcasting images or simply relaying information are all innocent civilians attempting to reveal the truth to the world. Citizen journalism also creates the potential for *genocidaires* to distort the truth. This was demonstrated in Rwanda in 1994 when some of the "journalists" who were advocating genocide on RTLM and Radio Rwanda doubled as the local correspondents for the English BBC radio and were reporting to the West on the state of affairs in the country

(Eltringham, 2004:165). It is likely that the coming decades will see increasing prevalence of staged events captured on mobile phones. This tactic is most likely to be used by *genocidaires* hoping to mislead the public and foreign governments to forestall intervention or other sanctions by creating a false image of mutual atrocity. New media, however, makes it harder for *genocidaires* to prevent stories of victims from making it to the outside world. Traditional media outlets may need to enhance their methods for determining the truth of the situation even without correspondents on the ground. Techniques could be based on assessments of the number and type of sources within a country.

Consequences for genocide prevention: a case study

In some cases, social media might provide the world with a clearer picture as to what is happening than traditional media are able. We can only speculate as to the international response if social media had been present in Rwanda at the levels at which it is being used in the Middle East today. One thing is certain: in 1994, traditional media mostly served to distort and obscure the events of the Rwandan genocide. The public's ability to understand the "context, causes, and consequences" of the violence was undermined (Schimmel 2011:1125). A number of problems associated with traditional media hindered the public's understanding of the situation inside Rwanda. "(R)acism, ignorance of African affairs, the journalistic imperative to report 'balanced' news, and the business bottom line of creating news that sells well and that is rich in stories and images that audiences will want to read but that may not reflect reality, each played an important role in informing the media's skewed coverage of the genocide" (Schimmel 2011:1126).

Another reason for ignorance of the situation was poor coverage resulting from the lack of bureaus and journalists based in Africa. While there were some based in South Africa, Kenya and Egypt, these were far from Rwanda and had little knowledge of the country (Schimmel 2011:1129-1130). In mid-April 1994, when the killing intensified, the number of news reports actually declined. This is because most correspondents left the country at this time when the other foreigners were evacuated (Thompson 2007:2). This meant that there was very little reporting from the country itself, or from individuals who understood it. Had social media and citizen journalism been operating in Rwanda, there would at least have been more reports being broadcast from people on the ground witnessing the events. This is significant because, as Thompson points out, "more informed and comprehensive coverage of the Rwanda genocide, particularly in those early days, might well have mitigated or even halted the killing by sparking an international outcry" (2007:3).

Social media in Rwanda would likely have conveyed the scale of the murder. Interpretation may have remained problematic, but it is likely the images coming out of Rwanda would have prompted increased resources for analysis. New media and citizen journalism would likely have increased the odds of intervention in Rwanda. On the whole, the odds of the outside world knowing that genocide is occurring or is likely are enhanced by new media.

New v. conventional media

The impact of citizen journalism on mainstream media practices is profound and increasing. They rely on each other, but are also in competition for viewers. Social media have acted as a watchdog, alerting international mainstream news media to growing opposition and dissent and providing images of events for wider dissemination

(Cottle 2011:652). Corporations use stories from social media forums and broadcast the images themselves, thus ensuring a wider audience. During the Arab Spring, Al-Jazeera became a disseminating tool for "user-generated content" (Harb 2011). The news channel put out a call for Arab citizens to send in their footage of the events in Egypt to its website. It re-broadcast this footage on its television screens (Harb 2011). Regardless, ordinary citizens are becoming the world's eyes and ears on the ground when a crisis develops.

The rise of social media means that conventional media now has a strong competitor for the attention of the public. Consumers are turning away from traditional sources of information such as newspapers and radios (Edmonds et al. 2012, *The Australian* January 2013)

The rise of social media also means less revenue for the producers and distributors of conventional media. This could result in reduced quality of reporting. It may reduce capacity to employ highly qualified analysts or pay for staff to travel to relevant locations. Because news corporations have less money to spend on reporting, they rely increasingly on footage recorded and explained by citizens and on press statements. Relying on either of these sources increases the risk of biased or incorrect coverage of an issue. There is less scope for the corporations to fund investigative journalism and thus stories are more likely to be reported in a superficial way.

Decreased revenue has led to the sharing of stories between media outlets. This results in an homogenisation of the news, with all corporations distributing the same stories with the same analysis. It increases the odds that important events, including those which presage genocide, will be missed by all major traditional news outlets. In a self-

perpetuating cycle, this decrease in news quality leads to an erosion of the people's trust in the media. A downward spiral of reduced trust and falling revenue is possible.

While in many cases citizen journalism obviously shapes traditional media, traditional media can enhance the message of citizen journalists. A story posted on social media will reach far more people if it is picked up by the traditional media. However, traditional media can act as a filter for citizen journalism. Western governments and media corporations may only broadcast amateur-recorded footage which supports a particular political agenda. This can be seen in the Western alliance's use of foreign citizen journalism emerging from the Middle East. As far as consumers were concerned, there was a stark difference between the citizen journalism around the uprisings in Iran (2009) and the media around the US invasions of Afghanistan (2001) and Iraq (2003).

During the Tunisian revolution, "cyber activists" collected material from Facebook, translated it, put it in context and re-posted it on advocacy websites and Twitter for journalists to pick up. If this content had remained solely on Facebook its audience would have been limited to members of certain groups and would probably not have been disseminated in ways which "proved pivotal to the media coverage" (Ghannam 2011:16). While this example indicates the significant impact of citizen journalism during this period, it also demonstrates the power and continuing importance of traditional media as an active filter and conduit for the information presented to it by citizens.

International public, governments and media

There is also a three-way contest between the international public, their governments and the media. Literature on the role of the media in international relations generally

focuses on the influence of the media on government or government's ability to manipulate the media. The theory of "manufacturing consent" holds that governments generally manipulate the media (Herman and Chomsky 1988), while the "CNN effect" theory argues that the media are more likely to influence government (Gilboa 2002, Robinson 2002). The literature has neglected to examine the potential for media to be influenced and directed by the people, what might be termed "grassroots influence". This phenomenon is now far more likely to occur with the rise of social media, and this is probably why the literature lacks a thorough examination of it. Grass roots influence has long been possible, if not actively taking place, and has simply not been given the attention it deserves due to preconceived notions of what was likely.

The impact of social media was recently apparent when the charity Invisible Children posted online an emotive film about the Ugandan warlord Joseph Kony, leader of the Lord's Resistance Army (LRA), who is accused of forcibly enlisting children as soldiers and sex slaves. The makers of the film call for military intervention in Uganda with the aim of capturing Kony and brining him to justice (*Sydney Morning Herald*, 8 March 2012). While the film is arguably simplistic and its calls for military intervention potentially naïve and dangerous, the point here is that it is an example of news "reporting" which was designed to reach people solely through social media forums and it certainly has done that. It received 100 million "hits" in just ten days and has led to vocal support for the campaign across the globe including some high-profile celebrities. In the context of the global financial crisis and US involvement in Afghanistan, increased attention has not yet been sufficient for military intervention. However, the attention of social media on Kony did increase the traditional media's coverage.

The power of "grass roots influence" can also be seen in the prominence which the "free Tibet" movement has been able to develop over the years. It sometimes happens that the public will relate strongly to the aspirations and culture of another group or people. This feeling of support in the community grows and is detected by the media. Because this cause is important to the people, it is examined by reporters and analysts, thus further broadcasting the issues involved. This has occurred in the case of the Tibetan independence movement.

From 1949, China began to show an interest in Tibet and in what it claimed as "liberating it from imperialist forces". The Chinese military presence in Tibet grew steadily and from 1959 onwards the Chinese launched a program of "reform". This involved the eradication of all traces of religious life and belief, including religious institutions; the eradication of Tibetan culture and language; forced indoctrination with Chinese propaganda and the compulsory learning of the Chinese language. The Chinese also carried out executions and mass murder, imprisonment, torture and relocated many Tibetans to labour camps (Wangyal 1984:119,120). The Tibetan religious leader, the Dalai Lama, was forced to flee and has never been able to return. He subsequently established a government in exile in Dharamsala, India, and has been a vocal advocate of Tibetan rights and autonomy (Powers 1995:178-179).

Perhaps because of the West's increasing interest in Buddhism and Tibetan culture, many have become aware of this period of Tibetan history and support the free Tibet movement. Although small, the Tibetan diaspora is distinctive and prominent in many Western countries. Large numbers of Tibetan Buddhist meditation centres have sprung up around the world, attracting many Western students and practitioners. Perhaps as a result, there are now also many non-governmental organisations supporting and

lobbying for Tibetan rights and freedom. For example, the International Tibet Network is a global coalition of non-governmental organisations focused on the situation in Tibet. This network "works to increase the capacity of individual member organisations, develops coordinated strategic campaigns, and encourages increased cooperation among organisations, thereby strengthening the Tibet movement as a whole". It currently possesses 180 member organisations, representing all six continents (International Tibet Network 2013).

Tibetans have also greatly influenced the media through their public demonstrations which gain the attention of reporters. A tragic example of this is the series of public self-immolations which have occurred in recent years. When Tibetan protesters have resorted to self-immolation, these events are reported on by Western media. Perhaps most important has been the influence of a charismatic leader who has developed an international media profile and celebrity status through his unique role as both an exiled Head of State and a major religious leader. The Dalai Lama's work has contributed substantially to publicising his people's plight.

If the news media is, at its core, a profit driven industry, it cannot fail to report on issues which are of importance to the public. It has indeed done so in the case of Tibet. This publicity has not only increased public support, but also had an impact on world leaders. For example, in March 2012, Australian Minister of Foreign Affairs Bob Carr requested that the Australian ambassador in Beijing be permitted to visit Tibet on behalf of the Australian Government. While this request was flatly denied (Sainsbury 2012), the fact that the Australian Government would risk angering an important trade partner by making it indicates that it recognised the importance of the issue for the Australian public. Obviously, no country is in a position to invade China over its treatment of the

Tibetan people. However given China's prestige and influence, the amount of pressure foreign governments have placed on it over its treatment of Tibetans and the coverage their ill-treatment has received in the traditional media, this case is testament to the potential power of grassroots influence.

Governments will always seek to manufacture the consent of their people or downplay atrocities when they don't feel it is in their interests to intervene. They will use traditional and new media to do so. Traditional media in turn seeks to influence the public and, through it, governments. Media coverage of a pre-genocidal or genocidal situation can influence what is done to prevent or intervene, if anything. The public, particularly those of democratic countries, has never been a completely passive player, however the unidirectional nature of traditional media has made it difficult for its voice to be heard. New media will likely increase grassroots influence, making the thee-way contest between governments, media, and the public more equal.

Discussion

Prerequisites for citizen journalism

For citizen journalism to occur, the society must have access to the technologies on which new media are based. For communication networks to become a major catalyst for political protest and change, a significant proportion of the population must have access to the Internet. It is therefore likely that this will preclude a number of underdeveloped countries in the foreseeable future. In 2010, Internet users made up just 1.1 per cent of the Iraqi population and 3.4 per cent of Afghanis. This is in stark contrast to over 21 per cent in Egypt, 34 per cent in Tunisia and 88 per cent in Bahrain (Stepanova 2011:3). New media may enhance resistance to repressive regimes, but it is by no means a necessary precondition. During the Arab Spring mass protests also

occurred in those Middle Eastern countries with some of the lowest levels of Internet exposure, such as Yemen and Libya (Stepanova 2011:3).

Beyond possession of these technologies, a substantial fraction of the population must also have the knowledge and willingness to use them. In this respect demographics become important. A high proportion of Arab youth is expected to drive the growth of social media usage. The profile of the most active social media users during the uprisings was that of a young, urban and relatively educated individual (Stepanova 2011:2). When considering the mobilising role of social networking in the Tunisian revolution, for example, it is important to note that eight out of ten Tunisian Facebook users were under the age of 30 (Harb 2011). Widespread use of new media is important. Just as the effectiveness of traditional media depends on how skilfully and ethically journalists are wielding their craft, the power of social media as a tool with which to help prevent mass atrocity crimes is dependent on how well-organised the groups using social media are (Cottle 2011:652).

New media and traditional barriers to prevention

While changes to news media have ensured that we now live in an age of unprecedented information sharing, it is by no means assured that this will be enough to circumvent the three traditional barriers to prevention: the UN Security Council, state sovereignty and a lack of political will. Some analysts believe that, while the media might have the power to influence the public, it is unlikely to be capable of influencing political decision makers to intervene when there exists a policy of non-intervention. The media can bring about intervention only when there is policy uncertainty (Robinson 2000). A lack of political will to prevent violence and the dominance of the value of state sovereignty would, therefore, continue as unchallenged barriers to prevention. The obstacle of the

UN Security Council could remain equally untouched. Proposals for humanitarian intervention are often blocked in the Security Council by those countries possessing more authoritarian regimes which are less likely than democracies to be swayed by the media. It is also possible that these countries are more likely to control and censor their native news networks and restrict international reporters, thus avoiding media influence.

Even if modern media have the power to sometimes erode the three traditional barriers, it in itself might pose its own barrier to prevention. As mentioned above, the reduced quality of the media and its reporting has led to a reduction in the public's trust in traditional forms of media such as newspaper, radio and, to some extent, television broadcasting.

Changes to news media are so profound that the social pressure on the three traditional barriers to prevention has grown to an unprecedented level. Never before has the public possessed an ability to share and receive information at such lightning speeds. This is already having an impact. The power of social media and its ability to direct foreign policy was demonstrated in the events of the recent Arab Spring. Alongside social media, and often occurring as a result of it, is the phenomenon of "grass roots influence". This is demonstrated by the way in which reporters have been drawn to the people's Tibetan independence movement and their subsequent influencing of political decision makers.

Conclusion

New media enhances the likelihood of genocide prevention in three ways. First, within conflict ridden countries, minorities have been comparatively advantaged by the diffuse

communication network it provides, in contrast to more centralised communication networks such as the traditional forms of media. New media facilitates victim group resistance, whereas centralised media lends itself to perpetrator coordination and coercion.

Second, minority groups within an oppressive society are psychologically empowered by the existence of social media and are thus more likely to resist the oppression. If there exists the opportunity to record and disseminate information about what is happening to them, the feeling of the people changes. The opportunity to engage in social media gives them a sense of being able to do something to improve their situation. It is likely that more and more people will start to record and disseminate news, or even to start resisting the oppression in other ways because they develop a new mindset that it can be done.

Third, social media provides a counter to compassion fatigue for those in other countries. Part of what causes compassion fatigue is that the traditional media have turned news consumers into merely passive receivers of gruesome images – as though watching an horrific yet unreal movie. Viewers watch image after image of countless bodies and hear so many reports of unfathomable statistics that it becomes almost meaningless. They become immune to the horror (Moeller 1999). Social media begins to break down this immunity because it changes the psychology of the viewers. No longer are they simply passive, mute receivers of news; they are now encouraged to be participants. This small feeling of power facilitates action and stops the viewer switching off. After reading a report through social media, the viewer can forward the information on to others, thus becoming a disseminator of news themselves. Through this small act of participation, it becomes clear to the viewer that these are real events

and are happening now to real people. The feeling of being able to help in some small way shakes the audience out of its compassion fatigue. Social media thus creates a feeling of social inclusivity and political and social engagement. The reports on social media are also generally more personal than those of traditional media. Viewers often read the accounts of individual victims, rather than trying to ingest statistics. This again awakes them to the reality of the events.

Social media presents a significant opportunity for the prevention of genocide and other atrocity crimes, but how long will this last? It might be that we are experiencing a brief window of advantage which will slowly close or at least narrow significantly. If, during a time of crisis, social media are fully engaged both inside and outside the country in question, but action to prevent the crisis does not follow, people within a conflict zone will feel increasingly disempowered once again.

Chapter 3: The literature on climate change and genocide, and a new argument

Introduction

There is deepening concern that climate change represents a serious threat to human wellbeing. The diminution and reallocation of a variety of vitally important resources caused by climate change will be a major factor. The likely nexus between climate change, resource scarcity and violent conflict in general is increasingly postulated. However, the specific question of whether future climate change and associated scarcity could contribute to genocide has so far received relatively little attention. Some authors argue that conflict is a risk factor for subsequent genocide. Others argue that genocide is the extreme end of a continuum of conflict, with many of the same causes as other types of conflict. Both perspectives suggest that if future climate change increases risk of conflict, the potential for related genocidal events is similarly increased.

Three general lines of inquiry are reviewed and evaluated in this chapter to identify if climate change contributes to conflict generally: theory supported by case studies, modern quantitative studies, and archaeological and historical research. Each approach provides a level of evidence for a connection between climate change and conflict. Such a link suggests the likelihood of some future genocides having climate change as one of an array of contributing factors, though clearly no genocide will be caused only by climate change and some genocides will be unrelated to climate change. The precautionary principle emphasises the need to address climate change because of the scale of harm represented by genocide.

In the wake of the Holocaust, Raphael Lemkin coined the term genocide — the murder of a people — to help define how the horrors of the Holocaust were exceptional and to distinguish this kind of killing from other forms of conflict. In 1948 the United Nations General Assembly unanimously passed the Genocide Convention. With the memory of the Holocaust still fresh, the international community vowed that "never again" should genocide be allowed to occur. Despite the weight of this pledge, research specifically into the causes of genocide with a view to prevention has not received the attention it deserves, with notable exceptions (Fein 1993; Harff and Gurr 1999; Charny 1991; Blass 1993). Available research on the causes of genocide suggests that a prior history of conflict is one of the important risk factors for future genocide. A history of war elevates genocide risk by increasing grievances, intensifying social divisions, normalising violence and proliferating arms (Fein 1993).

Many scholars now take this argument one step further and see genocide as part of a continuum of conflict. This perspective also recognises that genocides demonstrate a degree of improvisation and are not predetermined or inevitable. Genocide is simply one of a number of possible paths for a disintegrating, conflict-ridden state. Straus argues for a general consensus among second generation genocide scholars, such as Mark Levene, Michael Mann, Manus Midlarsky, Jacques Semelin, Benjamin Valentino and Eric Weitz, that genocide develops from a process of "escalation and contingency" (Straus 2007). According to this view, genocide would therefore have many of the same risk factors as non-genocidal conflict: poverty, resource scarcity (absolute and perceived), significant political change and upheaval, (de)colonisation and immigration. In general, any factors increasing the risk of non-genocidal conflict would tend to increase the risk of genocide.

Two elements make up the *prima fascia* case that future climate change may elevate the risk of genocide. First, climate change increases renewable resource scarcity in many parts of the world, (Cribb 2010; Intergovernmental Panel on Climate Change 2007), and renewable resource scarcity has been implicated as a causal factor in genocide (André & Platteau, 1998; Smith, 1998). Second, a growing body of scholarship argues that climate change exacerbates the risk of conflict; though debate on this topic remains. This suggests that climate change would also increase the risk of genocide based on the rationale described above.

As indicated, research on the connection between climate change and conflict has occurred through three lines of inquiry: modern case studies, statistical analyses of the modern era, and historical analysis including archaeology. This chapter reviews the evidence accrued through each line of inquiry that climate change increases the risk of conflict. The suitability of each line of inquiry for investigating a connection between climate change and genocide is also assessed, with a preliminary examination of Sudan and Rwanda providing the beginning of a theoretical framework linking climate change and genocide.

Climate change and resource scarcity

There is little doubt that climate change will exacerbate resource scarcity, particularly of food and other renewable resources (Cribb 2010). Climate change is predicted to increase the occurrence of drought (Intergovernmental Panel on Climate Change, 2007), including in the Horn of Africa (Funk, 2011; Williams & Funk, 2011), an area already affected by food insecurity. Climate change has increased severe weather events, including tropical cyclones, precipitation extremes and flooding (Allan 2011; Min et al. 2011; Pall et al. 2011).

Evidence suggests climate change is melting the world's glaciers, with some regions expected to lose three quarters of their glacial volume by the end of the century (Radić & Hock, 2011). This would have important implications for water security and irrigation. For instance, melting glaciers will decrease river flows and endanger the food security of 60 million people in the Brahmaputra and Indus basins (Immerzeel, van Beek, & Bierkens, 2010).

These climate change-related factors are likely to shift capacity for agricultural production away from the equator toward the poles (Intergovernmental Panel on Climate Change 2007). Productivity will decline near the equator with even small temperature increases. Mid- and high-latitudes may see agricultural output increase slightly initially, but this will decrease as temperature change exceeds three degrees Celsius (Intergovernmental Panel on Climate Change 2007). Recent research indicates that lack of water may limit gains in high-latitude agriculture with even less warming (Dronin and Kirilenko 2011; Tao, Zhang, and Yokozawa 2011). Notwithstanding, there is agreement that climate change in excess of three degrees will negatively impact total global agricultural productivity (Intergovernmental Panel on Climate Change 2007). Scarcity of basic resources already occurs disproportionately in lower latitudes, where agriculture accounts for a greater proportion of wealth production and a greater proportion of people rely directly on agriculture for their livelihood.

The Intergovernmental Panel on Climate Change (IPCC) predicts that climate change will cause sea levels to rise 0.18-0.59 meters by the end of the century compared with a baseline established from 1980-1999 levels (2007). More recent work suggests that this estimate could be conservative (Radić and Hock 2011), and the rise could be almost a

metre per century (Kopp et al. 2009). Importantly, using the last interglacial period as a model, a three to five degree Celsius increase in global temperature, which is in line with current predictions for this century, could eventually increase sea-levels by over eight metres (Kopp, et al., 2009). Sea level increase will have important implications for the world's deltas, such as the Ganges delta in Bangladesh, the Nile delta in Egypt and the Mississippi delta in the United States, each of which is important for agriculture.

The seas provide humanity with much of its food, but are endangered by climate change. Coral reefs, an important component of many fisheries, are already being bleached by rising temperatures (Cribb 2010; Hoegh-Guldberg 2011). Oceans absorb about a third of the anthropogenic carbon dioxide (Siegenthaler and Sarmiento 1993), slowing the greenhouse effect but increasing the acidity of oceans (Shaffer, Olsen, and Pedersen 2009). Acidification interferes with the chemistry required for coral and other marine organisms to form shells (Hoegh-Guldberg 2011). Ocean acidification also interferes directly with fish development and survival (Baumann, Talmage, and Gobler 2012). Climate change, in combination with increasing nutrient loads caused by pollution, is increasing the area of hypoxic dead zones in the ocean, areas in which no higher life forms can survive (Meier et al. 2011). Ocean acidification and hypoxia, combined with overfishing and pollution, endanger one of humanity's major protein sources (Cribb 2010).

Resource scarcity and genocide

Future climate change-related resource scarcity is almost certain and there is evidence that resource scarcity contributes to genocide. Virtually no authors claim that resource scarcity alone causes genocide, but that it interacts with other variables to increase risk (Kahl 2006; Smith 1998). Some scholars argue resource scarcity contributed to the 1994

Rwandan genocide, though elite motivations, colonialism and contrived ethnic tension are also acknowledged as driving forces (André and Platteau 1998; Diamond 2005; Prunier 1995; Kahl 2006). Prior to the genocide, Rwanda had been increasing in population, and had a population density higher than the industrialised United Kingdom and three times greater than Africa's third most densely populated country, Nigeria (Diamond, 2005). Potential farm land was almost entirely occupied, and plots were shrinking. Land scarcity prevented adult children from leaving their parents' residence and marrying (André and Platteau 1998).

Some Rwandans claim that war is required to reduce population to a level compatible with available land (André and Platteau 1998). The genocide served this purpose, and redistributed land. The study of one area of Rwanda indicates that the pattern of killing is not what would be predicted by the ethnic ideology of genocide against the Tutsi. This area had only one Tutsi, yet at least 32 people (5.4% of the population) died. Notably, large land holders were disproportionately targeted for killing (André and Platteau 1998).

There are other cases in which resource scarcity has been manipulated by governments for genocidal purposes. "Faminocide" occurs when a government knowingly creates or prolongs conditions in order to exterminate a group through starvation (Marcus 2003:247-248). Famine has been used as a tool for genocide throughout history (Jonassohn 1993). In Ukraine in 1932, an estimated five to seven million people starved to death because of strict grain quotas imposed by the Soviet government (Marcus 2003:245, Mace 1984:67). The goal of this intentional famine was "to destroy the Ukrainian nation as a political factor and social organism" (Mace 1984:67). In Ethiopia, the disastrous famine of 1984-1985 was caused by the government's strategy

of using starvation as a means of combating secessionists within certain regions of the country (Marcus 2003:245). The head of state, Colonel Mengistu Haile Mariam, went to great lengths to cover up the famine and obstruct relief efforts (Meredith 2005:331,332). Faminocide is logistically easier if a resource scarcity is "natural", for instance caused by a drought exacerbated by climate change.

Climate change and conflict

Three methods have been used to test a link between climate change or resource scarcity and conflict. Each method simultaneously suggests research for determining a link between climate change and genocide and contributes evidence for this investigation. Theoretical analyses, often based on a single or small number of contemporary case studies suggest causal pathways. Researchers also test the idea statistically, generally using proxies for global climate change such as renewable resource scarcity or relatively small regional climate changes. Analysis of history prior to the Holocaust expands the number of cases available, making for more robust statistical analyses. While care must be taken in drawing analogies with the past, in many ways civilisation is now more at the mercy of the environment than ever before (McMichael 2012).

Evidence linking climate change with non-genocidal violence should also inform thinking about the contribution of climate change to genocide for two reasons. First, genocide and non-genocidal civil conflict have many of the same root causes: poverty, resource scarcity (absolute and perceived), significant political change and upheaval, (de)colonisation and immigration. Second, war is itself a powerful predictor of genocide, with genocide often occurring against the civilian population of one of the warring parties (Fein, 1993). A history of war makes genocide more likely by sowing the seeds of grievance (Fein, 1993), making violence more acceptable and proliferating

arms. Therefore, if climate change makes war more likely, it also increases risk of genocide.

Theory of climate change and conflict based on modern case studies

Thomas Homer-Dixon's neo-Malthusian approach outlines several pathways from scarcity to conflict. Climate change can limit agricultural output locally, reduce total economic output and force migration. Migration and competition for a shrinking resource base can increase social divisions. These factors can disrupt social institutions, including government. Governments may become limited in their capacity to supply public goods, sustain legitimacy and maintain a military force of sufficient strength to dissuade challengers from using violence to press their claims (Homer-Dixon 1994, Homer-Dixon and Levy 1995, Homer-Dixon and Blitt 199). He includes climate change as a contributing factor to resource scarcity and violence (Homer-Dixon 2007).

Robert Kaplan extends the neo-Malthusian position, arguing that resource scarcity and overcrowding might exacerbate existing ethnic and religious tensions (Kaplan 1994). Meanwhile, the state and state borders may become irrelevant for much of the world, especially in former colonies. Many people will be able to improve their material or social situations through violence. The lack of acknowledged borders and recognition of the state will likely mean this trend threatens both developing and developed countries, where civilians will be targeted and loyalties localised, making nationwide peace difficult to sustain. All of these factors, in combination with and led by scarcity, will increase violent, anarchic tendencies throughout the world (Kaplan 1994). Kaplan's arguments were influential in the Clinton White House (Barnett, 2001), as illustrated by the President's former chief of staff writing about the effects of climate change on security (Podesta & Ogden, 2008).

Some theorists are less enthusiastic about a link between climate change and conflict. Political ecologists deemphasise the role of the natural world to focus on how political and economic systems have labelled, divided and used "natural" resources, and how these systems structure future action, including conflict. In this view, the keys to conflict are economic and political histories and institutions, rather than environmental constraints. Violence is conceptualised as cultural (Peluso and Watts 2001). More recently, other political ecologists noted that climate change and other trends will increase water scarcity, which has been linked with civil conflicts and a limited number of international conflicts. However, they argue that proper political institutions and processes can turn competition for water into transnational cooperation (Tir and Stinnett 2012; Davis and Hirji 2005). This cooperation can potentially extend from water management to other realms (Davis and Hirji 2005). Political ecologists are right to highlight that political and economic considerations are important in actors' decisions to engage in violence. However, this perspective tends to overlook the real limits that ecology places on actors' options. The constraints which the natural world places on political and economic systems will increase with climate change regardless of how they are conceptualised or divided.

Other scholars argue in favour of a "resource curse" hypothesis, in which countries with a large endowment of valuable natural resources can create motivations to rebel, and help finance rebellions. To this way of thinking, it is the abundance, rather than scarcity, of resources such as oil or minerals that increases the likelihood or duration of conflict (Ross 2004; Collier and Hoeffler 2004). Le Billon refines this idea, arguing that resource dependence, "conflictuality" and "lootability", increases the risk of conflict (2001). The ability to attract and sustain rebels seems limited to lootable commodities

such as diamonds, not agricultural resources (Ross 2004). While there may be rare instances in which agricultural products such as drugs are so valuable that they are able to be used in this way (Le Billon 2001), on the whole, agricultural production in developing countries is most often for food, and is therefore not lootable. Few modern civil conflicts have been financed through food production. Additionally, potential rebels will be deterred by a strong state, and this theory does not account for state strength.

Some writers maintain that natural resource abundance impedes development because it diverts human resources from other sectors of the economy. This lack of investment in diversification amplifies exposure to price shocks which can weaken the government via its tax-base and make it more vulnerable to attack (Soysa and Neumayer 2007). Whatever the truth of this argument for valuable non-renewable resources such as oil or diamonds, renewable resources are generally less profitable and therefore less likely to inhibit economic diversification. Further, the resource curse might operate in conjunction with resource scarcity, as a state becomes dependent on an initially abundant resource, fails to develop economically, and then sees its principle source of income become scarce (Kahl 2006).

Kahl combines and refines an emphasis on the environment with the more traditional security perspective that focuses on political and economic variables. His analysis synthesises these competing accounts, while giving greater specificity to neo-Malthusian pathways between scarcity and civil strife (Kahl 2006). He argues that demographic and environmental scarcity can lead to conflict within a state when there are high levels of "groupness" (when a people gain most or all of their identity, security and social supports from a single group, such as an ethnic group) and institutional

exclusivity (when the state and access to resources are controlled by a minority in a way that precludes peaceful redress of grievances). There are two idealised pathways from scarcity to violence: through state failure or state exploitation (Kahl 2006).

Legitimacy, cohesion and administrative capacity all contribute to state strength. Demographic pressure and environmental scarcity can weaken the capacity of the state to provide services and allocate resources, a situation which increases grievances and decreases legitimacy. Simultaneously, the state's monopoly on the use of force is eroded, thus decreasing costs faced by potential challengers to state authority. Scarcity also changes the other side of the equation by creating a group of people so desperate for change that they are willing to risk near-certain military defeat. As in Kaplan's analysis (1994), the absence of a neutral, legitimate state, powerful enough to arbitrate competing claims and guarantee security across society, leads to a security dilemma. People feel they can rely only on themselves, and their groups, for security against other parties, sometimes including elements of the state. This leads to a situation in which efforts to protect one's own interests are regarded as threatening by others, who also protect their own interests, in a tragic spiral of self-arming and violence. Scarcity poses an additional threat to people's security, magnifying the effects of state weakness. Scarcity can help overcome the problem of collective action, which sometimes stops large-scale violence. Promised seizure of scarce resources provides individual incentive for action (Kahl 2006).

In contrast to the bottom-up escalation of tension and violence as a result of a state that fails when confronted with resource scarcity, an alternative pathway from scarcity to violence is top-down exploitation by political and economic elites. Environmental pressures provide incentives for elite exploitation. As environmental scarcity weakens

the state, elites shore up their positions. They can employ intergroup violence to simultaneously distract the population from structural problems and inequalities and weaken political opponents. Scarcity also increases capacity of elites to incite intergroup violence. Insufficiency of resources, such as land, can result in zero-sum competition between groups, while deprivation can increase tensions (Kahl 2006).

Outside the academy, military and defence planners conceptualise climate change as a "threat multiplier" (Sullivan et al. 2007) in a variety of countries, including the United States (Carmen, Parthemore, and Rogers 2010; Department of Defense 2010), Britain (McNeely 2011), Germany (Schubert et al. 2008) and Australia (Behm 2009). The military perspective is practical and focuses on future scenarios and risk mitigation. Most work assumes scenarios considered likely by the Intergovernmental Panel on Climate Change (IPCC) (2007), though abrupt climate change is considered a risk because of its potentially catastrophic consequences (Schwartz and Randall 2003). Abrupt climate change, while not considered as likely as a relatively steady shift, has occurred in the past (Alley, et al., 2003; Steffensen, et al., 2008) and could impact precipitation in low latitude areas (Severinghaus, Beaudette, Headly, Taylor, & Brook, 2009). Because of its potentially catastrophic security implications, abrupt climate change is considered a defence risk (Schwartz & Randall, 2003).

Some authors (Mazo 2010; United Nations Environment Programme 2007) contend that climate change contributed to the genocide in Darfur. Africa is predicted to be disproportionately disadvantaged by climate change (Intergovernmental Panel on Climate Change 2007), and recent work indicates that East Africa is increasingly subject to drought during the agriculturally important March-June 'long rains' season (Williams and Funk 2011). Climate change might have hastened desertification (United

Nations Environment Programme 2007). In combination with other factors such as population expansion, decreasing land suitable for grazing or agriculture increased competition for land. Historical and cultural factors, including competition for oil, a lack of mediating forces able to operate between groups, weak and biased governance, tribal and political differences, and diminished livelihood opportunities have contributed to intergroup violence in Sudan (Mazo 2010; United Nations Environment Programme 2007).

An analysis of the Darfur conflict demonstrates the way in which the widespread understanding of the role of climate change in genocide and mass atrocities might improve the international community's response to future climate change related genocides. The conflict in Darfur has many contributing factors, the relative importance of which have changed over time, but includes British colonisation, the process of de-colonisation, resource distribution and allocation, and the efforts of minority ethnic groups to retain vastly disproportionate power in government and civil society (Natsios, 2012, Flint and De Waal, 2008). The role of climate change must also be acknowledged (United Nations Environment Programme, 2007, Mazo, 2010). The desertification of this region has interacted with the other causes of the genocide in several ways which magnify them and increase the likelihood of genocide. It made a region, in which a large proportion of the wealth produced was either from farming or herding, less productive (Reeves 2008). This likely resulted in less economic progress directly because of decreased production, and indirectly by marginalising the area further and made it easier for the government in Khartoum to neglect its economic development. Climate change also magnified ethnic and social tensions. The farmers and herders, who previously used the same land, came to regard their interests as in direct opposition to each other as desertification decreased the productive capacity of

the region (Boslough et al. 2004:14, Reeves 2008). In effect, climate change has shrunk the resources the two groups previously shared. They no longer feel that there is enough for everyone – a perception which may well be correct.

There are dangers inherent in viewing climate change as a military rather than human security issue (Barnett 2001; Elliott 2010). Barnett argues that the military is a substantial contributor to climate change through carbon emissions and environmental degradation, meaning that a military solution to a problem of resource scarcity would risk further degrading the environment and increasing local scarcity (2001). Given governments' finite budgets, investment in military solutions might preclude humanitarian options, such as technical assistance to increase agricultural output or decrease environmental footprint.

Strengths and weaknesses of the case study approach

The in-depth analysis allowed by case studies can be a fruitful way to generate theory and specify causal pathways. This has proven true in efforts to determine whether or not there is a causal link between climate change and conflict. Many case studies have focused on resource scarcity rather than climate change *per se*. This is useful because the climate change that has recently occurred is only a fraction of that anticipated to occur in the coming century. Future climate change will not necessarily create resource scarcity that parallels resource scarcity in the recent past, not least because future climate change may impact larger regions or the planet as a whole. Nevertheless, when done well, the narrow focus of case studies can allow consideration of how future climate change might differ from the specific event under consideration.

The narrow focus of case studies is also a limitation, in that there is little guarantee that the dynamics in one recent situation will be replicated in future scenarios. However, the growing number of case studies linking climate change or resource scarcity with conflict increases the likelihood that the dynamics of these single events will be replicated in the future, leading to conflict. Case studies have focused on settings in which conflict has occurred, raising the possibility of selection bias. However, the author knows of no literature demonstrating an instance of resource scarcity preventing conflict.

The practical utility of viewing climate change as a military threat has been rightly questioned. If there are not enough resources, is it better to invest in their forceful redistribution, or increase total available resources? Couching climate change as a *military* threat presupposes an answer. A militarised response to the risk that climate change will increase conflict could unintentionally elevate the risk of conflict, including genocide.

Quantitative analysis of climate change and conflict

Results of studies quantitatively testing for a connection between climate change and conflict are best interpreted as a whole. About half find that the effects of climate change increase the risk of conflict (Adano et al. 2012; Hsiang, Meng, and Cane 2011; Hendrix and Salehyan 2012; Raleigh and Kniveton 2012). One study best accounts for the global nature of climate change, and therefore avoids one of the sources of underestimation of its effects (Hsiang, Meng, and Cane 2011). It shows that between 1950 and 2004, the onset of civil conflict in the tropics was twice as high during warmer, drier El Niño years than in cooler, wetter La Niña years. This suggests that El

Niño played a role in one fifth of civil conflicts during this period (Hsiang, Meng, and Cane 2011), perhaps through the causal pathways outlined above.

About half of the quantitative studies of the period since the Holocaust find no significant connection between climate change and conflict (Theisen 2012; Bergholt and Lujala 2012; Koubi et al. 2012). Only one peer-reviewed study was identified which suggests that climate change will decrease the incidence of conflict (Slettebak 2012). Importantly, when the independent variable is changed from a binary measure of whether a climate disaster occurred in a country in a given year to the number of climate disasters in a country in a year (which better captures the cumulative effects of climate change and better accords with theoretical pathways), climate disasters are correlated with an *increased* number of conflicts, however the effect is not significant.

Taken as a whole, quantitative studies of the recent past suggest that climate change will make conflict, and genocide, more likely. The tendency for the designs of these studies to underestimate the effects of climate change, an almost universal weakness of these studies discussed below, reinforces this conclusion.

Strengths and weaknesses of the quantitative approach

While statistical analysis is free of some of the biases that can occur in selecting individual case studies, it is only as good as its variables. The likely climate change in the next century will be faster and of substantially greater magnitude than anthropogenic climate change to date. Because future climate change does not have a direct historical analogue, quantitative analysis must use proxy measures.

Finding suitable proxies has proven challenging, as those selected underestimate the effects of climate change. Most studies use proxies such as the frequency of climate related disasters (Slettebak 2012; Bergholt and Lujala 2012), variations in precipitation (Hendrix and Salehyan 2012; Raleigh and Kniveton 2012) or temperature, or some combination of these (Theisen 2012; Koubi et al. 2012). Such variables do not capture the scale of the predicted changes in climate, the effects of which may not be linear. Rarely does a study use more than two proxies, so interactions between the physical aspects of climate change are missed. On the ground, the effects of climate change are likely to be influenced by changing precipitation amounts and timing; temperature highs, lows and averages; the frequency and timing of extreme weather events; and other climate variables. Long-term changes to climate, and their likely ecological, social and political consequences effects are similarly ignored.

Use of localised climate change or resource scarcity as a proxy measure does not approximate a future in which worldwide agricultural productivity is decreased. Modern trade allows for massive importation of locally scarce resources, while migration allows the movement of people away from weather-affected areas. Decreased planetary agricultural productivity could inhibit these buffers. Countries may prevent export of certain food products, as occurred during the 2008 food-price spike (Cribb 2010), and increase restrictions on immigration. Further, worldwide deficits of certain resources may prove problematic. Between 2001 and 2008, the world produced less grain than it consumed. Consequently, worldwide grain reserves dropped from 100 to 50 days' supply (Cribb 2010). The problem of hunger could expand from distribution to include net supply. Other resources, such as water, timber, and arable land, are also at risk. The design of most quantitative studies of the modern era cannot capture these effects.

Many studies also miss the temporal dimension of climate change. The full effects of reduced economic growth due to climate change may take years to emerge and cannot be captured using standard independent variables. These studies frequently use the likelihood of conflict in a given country-year as the dependent variable, assuming the effects of independent variable will play out within a couple of years. This does not capture the multiple pathways between climate change and conflict hypothesised by those doing qualitative research (Kahl 2006; Homer-Dixon 1994; Kaplan 1994), who note that the trigger for violence need not be related to scarcity or climate (Kahl 2006). Many of these pathways would require several years to play out. There have always been bad years. It is in large part the frequency and magnitude of these years that makes climate change risky.

In summary, quantitative studies of the modern era systematically underestimate the effects of climate change on conflict. To partially counteract this tendency, they are best interpreted as a group, with the expectation that some studies will miss causal links even where they exist. Read in this way, the body of quantitative studies suggests climate change will increase conflict and with it the risk of genocide. Importantly, the study which best accounts for the global nature of climate change, and therefore avoids one of the sources of underestimation, finds a strong link between climate change and civil conflict (Hsiang, et al., 2011).

Climate change and conflict in the pre-Holocaust era

Investigation of the period before the Holocaust draws on multiple disciplines. Archaeologists have often explained societal collapse and concomitant conflict with reference to environmental factors, climatic change chief among them. Previously, some early explanations of collapse or war did not adequately consider other factors (Tainter

1988), however more recent work generally avoids this problem (Diamond 2005; Keeley 1996).

Study of individual societies has led to the conclusion that violent conflict was, in some instances, driven partly by climatic change which led to a decrease in food availability (Haas 2009). The Anasazi built a desert civilisation in the Southwest United States. They were able to harness agriculture to increase food production by damming the arroyos to capture localised rain for irrigation. Population density grew beyond what could be supported by hunting and gathering. Widespread trade networks allowed survival through localised droughts from about 600 to 1200 C.E. (Haas 2009; Diamond 2005).

Many scholars contend that a widespread and lengthy drought contributed to a violent collapse of the Anasazi. The final period saw an increase in seemingly deliberately burned villages and defensive structures. Skeletal remains bear wounds which also suggest that violence increased. People, potentially motivated by hunger, engaged in cannibalism (Diamond 2005; Marlar et al. 2000). Inter-group violence in this area appears to be almost entirely limited to this period of scarcity, with peace preceding and following (Haas 2009). Climate change contributed to prehistoric violent conflict in other areas, including the Titicaca Basin (Arkush 2008), Ireland (Turney et al. 2006), the Middle Missouri region centering on South Dakota (Bamforth 2008) and East Africa (Kusimba 2008).

Moving from individual cases to surveys of greater geographical and temporal scale, a series of studies has shown a strong statistical link between climate, famine and war deaths in Europe and China during the preceding millennium (Zhang et al. 2011; Zhang

et al. 2006; Zhang et al. 2007). Analysis shows that periods of climatic cooling decreased agricultural production, which increased food prices. The resulting social disturbances led to population collapse and increased war frequency or duration, escalating war deaths (Zhang et al. 2011; Zhang et al. 2007). During the mild cooling of the late 18th and 19th centuries in Europe, food prices and war increased along the same lines as previously, but intercontinental migration, trade and industrialisation prevented population decreases (Zhang et al. 2011).

Strengths and weaknesses of historic analysis

Historic case studies are often less rich in information than contemporary cases, and afford less examination of causal processes. They are also open to the criticism that times past are unlike the present — that recent technological gains make modern people immune to nature's vagaries. Yet modern societies are closer to the margin than ever before. Humanity exploits a greater proportion of the world's agriculturally productive areas, with little room for migration; depends on food systems strained by disrupted phosphorus and nitrogen cycles, land degradation, over-fishing, and water shortages; and is reliant on complex infrastructure (McMichael 2012). Additionally, the world's population is growing at a rate unparalleled in the history of our species, with each new person demanding more from the environment.

Today's global civilisation shares more important traits with individual ancient civilisations than it does with individual modern countries. In today's world, there are innumerable economic, social and geopolitical connections between all countries (Barber 1995), to such a degree that it is best viewed as one system, liable to collapse as one (Diamond 2005). Many of the past societies examined for links between climatic change and war were unconnected with other societies, and could not rely on trade to

sustain them in the face of localised famine. Unlike contemporary individual countries, which can import resources from abroad, they are analogues of this island planet. If the past is a guide to the future, climate change may increase the risk of conflict and genocide.

Prospects for genocide research

Several of the better-designed quantitative studies find a link between climatic changes or resource scarcity and conflict. While there is not the same near-consensus of conclusions as in qualitative studies, or in the field as a whole (Salehyan, 2008), the evidence suggests that future climate change may increase the likelihood of conflict.

Genocide research would benefit from quantitative studies testing links between climate change and genocide in the modern era. However, there are two impediments to such research. Genocide occurs far less frequently than conflict in general, resulting in reduced power for any statistical tests. Additionally, the definition of conflict is fairly straightforward, and frequently uses a definition based on a minimum number of battle deaths (Gleditsch, Wallensteen, Eriksson, Sollenberg, & Strand, 2002). Classifying conflicts as genocides is more contentious, however, because the definition of genocide includes a concept of intent "to destroy, in whole or in part, a national, ethnical, racial or religious group" (United Nations General Assembly, 1948). Intent is hard to measure with certainty, particularly when perpetrators may hide their intent to avoid prosecution.

Debate over whether or not contemporary events qualify as genocide (Chesterman, 2001; Fierke, 2005; Totten, 2006) demonstrates the difficulty of classification. The passage of time makes this task even more difficult, especially without contemporary written records. The intent of past actors, integral to the definition of genocide, is almost

impossible to reconstruct purely from material remains, though remains of massacres of men, women and children are strongly suggestive. Some argue that a very high proportion of ancient warfare was genocidal (Smith, 1998). Warring parties would often have considered themselves different ethnicities and sought to kill each other partly on that basis.

Taken as a whole, evidence from archaeology and history prior to the Holocaust provides strong support for the contention that climate change increased the risk of conflict. It is likely that much of this conflict was genocidal by definition, and even if it were not, because war increases the likelihood of genocide, it seems likely that climatic change in the past led to increased instances of genocide. This evidence strongly suggests that climate change will increase the risk of genocide in the future.

Conclusion

Causal links are difficult to prove in the social sciences, especially when the hypothesised cause — climate change of the speed and scale predicted over the coming century — has not occurred while humans have been writing history. Available evidence suggests that climate change may contribute to genocide and other forms of conflict. Theorists have outlined plausible pathways by which climate change increases the risk of conflict using modern case studies, including in Darfur. They emphasise that climate change and resource scarcity will increase the risk of conflict by interacting with other factors, including socio-political factors. This view is supported by historical and archaeological studies, which suggest that causal pathways between climatic change and conflict may take years to unfold. Quantitative studies necessarily reduce future climate change to a few proxy measures, are unable to fully capture the interactions

between climatic and socio-political factors, and generally assume that the effects of climate change on conflict will occur within two years. Despite this reduced sensitivity, many find a link between climate change and conflict. If the world takes seriously its pledge that "never again" can genocide occur, further investigation is warranted.

The possible connection between climate change and genocide provides additional impetus to global efforts to decrease human contribution to climate change. Beyond the moral imperative, genocide and other mass-atrocity crimes have their own legal standing. The Genocide Convention places on contracting parties a legal, if general, responsibility to prevent genocide (United Nations General Assembly 1948). The Responsibility to Protect was adopted by heads of state in 2005 at the World Summit as an "international principle" (Bellamy, Davies, and Glanville 2010). It is likely that future generations will find us culpable if we do not limit climate change, for these and other reasons.

Chapter 4: R2P and climate change

Introduction

If climate change elevates the risk of genocide, this has clear implications for prevention. The doctrine of Responsibility to Protect (R2P) is a norm which holds that while the primary responsibility to prevent genocide lies with the state in which it may occur, other states have a secondary responsibility to prevent genocide through strengthening capacity of at-risk states. Should genocide occur and the host country be unwilling or unable to stop it, other countries have a responsibility to intervene if they can do so effectively, including by military means under limited circumstances. Other authors have argued that R2P should be extended to include environmental problems such as climate change (Axworthy and Rock 2009).

This chapter argues that because of the link between climate change and genocide, no extension of R2P is needed for the concept to facilitate prevention and intervention. Countries can work now to prevent genocide in at-risk states under R2P as it currently stands, by mitigating climate change. That said, however, this chapter highlights a current policy gap, in which there is no hierarchy of responsibility beyond the host country for preventative action or intervention. It further suggests that those states contributing most to climate change may bear particular responsibility for prevention and intervention in genocides in which climate change is a contributing factor.

This chapter also proposes that the United States could enhance its own reputation and strengthen acceptance of R2P in the Global South by committing to greenhouse gas emission reduction as part of upholding its responsibility to protect. This would be most effective with a binding international treaty with other major emitters. The mitigation of

climate change achieved by this measure would enhance the context for peace, which might in turn reduce peacekeeping demands on the American military. It would also reduce global risk of genocide, now and into the future.

Definition of R2P

The text adopted by the UN in 2005 holds that individual states have the primary responsibility to protect their citizens from genocide, war crimes, ethnic cleansing and crimes against humanity – hereafter referred to as "the four crimes" – occurring within their borders and that, when they are unwilling or unable to do so, this responsibility shifts to the international community. The 2005 World Summit Outcome document declared that,

> The internal community, through the United Nations, also has the responsibility to use appropriate diplomatic, humanitarian and other peaceful means, in accordance with Chapters VI and VIII of the Charter, to help to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity. In this context, we are prepared to take collective action, in a timely and decisive manner, through the Security Council, in accordance with the Charter, including Chapter VII, on a case-by-case basis and in cooperation with relevant regional organizations as appropriate, should peaceful means be inadequate and national authorities are manifestly failing to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity (World Summit Outcome 2005).

The three pillars of R2P underlying the Outcome Document of the 2005 United Nations World Summit were further formulated in the Secretary General's 2009 Report on

Implementing the Responsibility to Protect (Ban 2009). They advance the R2P agenda by explaining how the doctrine is to be implemented.

Pillar one – the protection responsibilities of the state

Pillar one focuses on the internal protection responsibilities of each state. Under R2P, states have a duty to protect their populations, whether they are nationals or not, from any one of the four crimes, and from their incitement – the latter being critical for prevention (Ban 2009:8, Bellamy et al. 2011:1). State sovereignty should not be seen as posing a legal or political barrier to R2P. As Luck points out, it does not challenge the sovereign authority of states to do anything that they would admit to wanting to do in the first place. The concept of R2P in fact "seeks to reinforce one of the essential elements of statehood and sovereignty: the protection of people from organised violence" (Luck 2011:17).

Pillar two – international assistance and capacity-building

Pillar two stresses international assistance and capacity-building. The international community has a responsibility to assist states to meet the obligations of pillar one. This pillar draws on the cooperation of Member States, regional and subregional arrangements, civil society and the private sector, as well as the United Nations system (Ban 2009:9). As Ban points out, this pillar is often neglected by commentators and policymakers but it is "critical to forging a policy, procedure and practice that can be consistently applied and widely supported". The successful prevention of atrocities builds on pillars one and two (Ban 2009:9, Bellamy et al. 2011:1).

Pillar three – timely and decisive response

Pillar three involves a timely and decisive response by Member States working collectively when a state fails to protect its populations. Although this pillar is often discussed, it is usually understood too narrowly. The 2008 global efforts to prevent further bloodshed following disputed elections in Kenya demonstrated that, if the international community acts early enough, options are not limited to either doing nothing or using force. A timely and decisive response could involve "any of the broad range of tools available to the United Nations and its partners". These could include pacific or coercive measures or collaboration with regional and subregional arrangements. The success of the action depends on an "early and flexible response" (Ban 2009:9).

Even when military intervention becomes necessary under pillar three, there are various constraints on its implementation. The main conditions for such an action include:

- *Just cause* – the defence of innocent individuals against armed attack; the retaking of persons, property or other valuables that were wrongly taken;
- *Authority to judge the justness of a cause* – the person or body authorising the use of force has to be able to control the use of force. It must, therefore, have a clear chain of command;
- *Right intention* – the authority should act with a just intention rather than for territorial advantage, intimidation, or coercion;
- *Proportionality of ends* – the overall good achieved by the use of force should be greater than the harm done. The degree of force and means must be appropriate to the just ends that are sought;
- *War must be the last resort* – at the time the decision to use force is made, it must be clear that no other means will bring about the just end;

- *Reasonable likelihood of success* – it must be possible that such an intervention will achieve the justified ends that are sought; and
- *The aim must be peace* – international stability and security should be the focus (Fierke 2005:47).

R2P as a norm

The strength of the R2P principle is that it shifted the intellectual ground from a deadlocked debate over whose rights were paramount – the sovereignty of the country in which the crimes are occurring, the victims of the crimes or the international community – to a discussion that holds responsibility, rather than rights, as primary (Evans 2008). Thakur argues that its strength as a norm is increasing (2011). This is important because its legal status is uncertain (Bellamy et al 2011:5). Its strength relies on widespread acceptance.

The importance of prevention within R2P

The value of preventative measures was stressed under the formulation of R2P which gained widespread international acceptance. In paragraph 139 of the World Summit Outcome document, it states that:

> *We also intend to commit ourselves, as necessary and appropriate, to helping States build capacity to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity and to assisting those which are under stress before crises and conflicts break out* (World Summit Outcome 2005).

Although pillars one and two of the doctrine emphasise atrocity prevention, as Rosenberg points out, academic and policy debates on R2P often neglect this

preventative dimension (2011:157). R2P provides for, under certain circumstances, an obligation of "due diligence" which requires states to take any reasonable measures of prevention which could be expected of states in a similar position (Rosenberg 2011:157). Rosenberg also points out that R2P provides a "modicum of clarity and discipline" to the disparate body of law on the duty to prevent (2011:157).

The tendency in the literature to focus only on the military intervention aspect of R2P goes directly against the spirit of R2P's creators (ICISS 2001, Evans 2008). It also threatens to undermine the support the concept has achieved internationally, particularly in countries with a history of colonisation, as a de-emphasis on intervention was required to gain support from these quarters in the first place (Evans 2008).

R2P as a mechanism for addressing genocides partially caused by climate change

The doctrine of R2P is the most obvious mechanism with which to address genocide, particularly if climate change is a contributing factor. The processes which lead from climate change to an increase in the likelihood of genocide have many stages, as outlined in the preceding chapter, including decreased renewable resource production, decreased economic output, increasing inequality, increasing ethnic tension and impairing capacity for government to respond to these issues. Each of these represents a potential, if not necessarily sufficient, intervention point by which international assistance could reduce the likelihood of escalation to genocide.

One strength of R2P in situations of genocide to which climate change has contributed is that it specifically outlines multiple intervention points. Not only does it allow for military intervention to halt fighting or to keep the peace, it also allows for external preventative assistance to manage environmental degradation and resource scarcity,

assistance to foster state capacity building to manage the challenges of climate change and assistance in the form of aid and development to ease the social pressures caused and exacerbated by climate change and resource scarcity.

A brief history of state sovereignty

The Treaty of Westphalia in 1648 established the principle that states were equal in their sovereignty and prevented the interference of one state in the domestic affairs of another. For many years this doctrine was used to justify inaction to prevent genocide within the territory of other states (Thakur 2011:160). However, areas colonised by Europe, including much of Africa, Asia and the Middle East, were not considered to be sovereign, except as the colonies of other powers. This history, combined with decolonisation processes which often saw former colonial powers exerting undue influence, has caused much of the Global South to keenly guard territorial sovereignty (Thakur 2011). The Cold War helped preserve a situation in which state sovereignty was privileged over the need to protect victims of genocide in other countries. Keeping international peace was paramount because the potential consequences of making the Cold War hot were too enormous to risk (Thakur 2011:120). This history meant that until R2P, territorial sovereignty of a state was paramount over considerations of human rights. If the norm of R2P is weakened, the norm would likely revert to this position.

The history of R2P: dilution to gain acceptance

The development of the concept of R2P was prompted by the mass atrocities of the 1990s (Rosenberg 2011:190), including in Bosnia, Kosovo and Rwanda. With its 2001 report, the International Commission for Intervention and State Sovereignty (ICISS) brought this idea into the mainstream and helped to convince world leaders of its validity and urgency. Since its adoption at the World Summit 2005, the concept of R2P

has become solidified through such things as a "Global Centre and network of regional affiliates dedicated to advocacy and research, a global coalition of non-government organisations, a dedicated academic journal and book series, a research fund sponsored by the Australian government" (Bellamy et al. 2011:1). Most important of all, "R2P has made its way onto the international diplomatic agenda" (Bellamy et al. 2011:1). While it is now a "prominent feature" in any international discussion around the prevention of genocide and mass atrocity crimes (Bellamy et al. 2011:1), this status is not yet solidified. Further, the doctrine had to be diluted before it was to be adopted at the World Summit.

The strength of resistance faced by those advocating the passing of R2P necessitated that the doctrine undergo a radical reshaping so that it could be adopted by the UN in 2005. The triggers for intervention were substantially curtailed. Substantial changes to the rules governing enforcement and the role of the Security Council were also required to ensure adoption.

The original ICISS report had a broad range of possible triggers for R2P, including "overwhelming natural or environmental catastrophes, where the state concerned is either unwilling or unable to cope, or call for assistance, and significant loss of life is occurring or threatened" (ICISS 2001). However, natural disasters were excluded as grounds for invoking R2P by 2005 (Thakur 2011). For the UN Sixtieth Anniversary World Summit in September 2005, the UN Secretary-General's High-Level Panel on Threats, Challenges, and Change released a report, *A More Secure World: Our Shared Responsibility*, in December 2004. It was wider in scope than the ICISS report. Its analysis of human security linked "poverty, disease, and environmental degradation

with conflict both within and between states, terrorism, proliferation of weapons of mass destruction, and transnational organized crime".

In the end, the triggers for intervention were reduced to the four crimes listed in the Outcome Document from the 2005 World Summit. This was critical to gain consensus (Luck 2011). All of these crimes – with the exception of ethnic cleansing – are well established in international law and no state would claim the right to commit them under the justification of domestic sovereignty (Luck 2011:17). Through the Summit Outcome document, states affirmed their responsibility to prevent these four crimes and their incitement (Ban 2009:23). While the shift in discussion from 'rights' to 'responsibilities' was critical, R2P did not revolutionise the possible legal triggers for intervention.

The panel's report, *A More Secure World: Our Shared Responsibility*, also included proposals for UN reform, including that of the Security Council (Evans 2008:44). After the terrorist attack on the World Trade Center on 11 September 2001, there was a shift in focus from humanitarian intervention to pre-emptive war and the "war against terrorism" (Weiss 2004:136). Restricting the Security Council's use of the veto to constrain UN action was part of the original proposal leading up to the Global Summit in 2005. However, this was abandoned when the permanent five members of the Council indicated that they would withhold support for R2P as long as the draft document contained any reference to limitations of the veto (Axworthy and Rock 2009:61). China and Russia, along with many other states, stressed that enforcement action should be decided by the Security Council using the well-established Charter rules. This preserved the right of any of the permanent five members of the Security Council to veto any enforcement action (Luck 2011:23). To increase the chances of

consensus in the Security Council, the ICISS recommended the establishment of criteria on the use of force, to which the permanent members would be committed. Almost all of the permanent members expressed dissatisfaction with the idea of formalised criteria for intervention. The US and China rejected the idea. Russia was generally supportive but argued that action could not be taken without Security Council approval. The United Kingdom and France, both of whom advocated the ICISS principles, did not believe that the formulation of criteria for humanitarian intervention would improve "political will and consensus" (Bellamy 2005:36).

The compromises to the original vision of R2P have meant that some do not view this Summit as a great success. Weiss and Bellamy believe that it constituted a "watering down" of R2P: consensus could only be reached by emphasising the host state's primary responsibility in protecting its citizens, rather than the responsibility of the international community to intervene (Weiss 2007:57, Bellamy 2006). The caveats put on R2P during its development have led some R2P advocates to refer to the outcome as "R2P lite" (Luck 2011:23).

Even though R2P was changed and limited, it still needs to be strengthened as a norm, particularly given its weak legal status. While the 2005 World Summit ushered in a greater level of formal endorsement of R2P, it also demonstrated a significant level of resistance to both "the language and substance of R2P in parts of the global South" (Evans 2008:50). The doctrine continues to face opposition from individual powers such as China, and from some parts of the global South (Bellamy et al. 2011).

Why small states signed up

Major powers will never have their territorial sovereignty challenged by R2P, first because the UN Security Council will never authorise it (Thakur 2011) and second because of the requirement for reasonable likelihood of success of military action. The asymmetry of the possibility of military intervention represents a potential liability to less powerful states, and would be of particular concern given the history of colonialism and lack of respect for sovereignty. Critics of R2P argue that it is a "dangerous and imperialist doctrine that threatens to undermine the national sovereignty and political autonomy of the weak or that it is little other than rhetorical posturing that promises little tangible improvement in the protection of vulnerable people" (Bellamy et al. 2011:3). This potential liability had to be outweighed by the benefits of endorsing R2P.

Thakur proposes that R2P was able to achieve the support of small states because it provided a strict set of rules outlining when incursions into sovereignty were warranted (2011). However, the norm preceding R2P prioritised sovereignty, so that the adoption of R2P increased the likelihood that territorial sovereignty would be threatened, as the preceding discussion and Evans (2008) make clear. Another argument is that it was difficult for countries to rhetorically defend the four crimes or admit that they might occur within their borders. While this is true, small states could have simply raised the spectre of R2P being used as a pretext for military interventions even when none of the triggers was present. The invocation of R2P to justify the Russian invasion of Georgia and US invasion of Iraq show that such an argument would have been justified. Many African states signed up in part because R2P addressed their fear of state failure in their region. The promise of aid which might prevent atrocity crimes and help rebuild after they are committed was a key factor in gaining the support of small states (Evans 2008).

It was this promise, the second pillar of R2P, that was the hook for many small states, and its fulfilment is likely to remain essential to their continued support for the doctrine.

Risks and future prospects of R2P

The legal standing of the concept of R2P is as yet uncertain. As Bellamy et al. point out, to date there is very little consensus on the nature of the relationship between R2P and international law (2011:5). After 2005, some claimed that R2P represented a new international policy norm, however, it was never clear whether this new duty amounted to a legal obligation to intervene when genocide occurred (Bellamy et al. 2011:6). The majority of legal commentators agree that R2P is not yet a legal norm largely because it is too vaguely worded, lacks clarity and has not been appropriately legislated (Bellamy et al. 2011:7). The UN most commonly adopts a middle road approach emphasising that R2P is "based on well established principles within existing international law" (Bellamy et al. 2011:9).

Responsibility to Protect seems likely to become more widely accepted as a norm. However, the actions of more powerful states could jeopardise its legitimacy. When major powers use the doctrine of R2P as a pretext for military intervention in smaller states where none of the four crimes is present, as Russia did for Georgia and the US did for Iraq, it erodes the legitimacy of R2P. Conversely, it also weakens the norm when genocide is ignored by the international community, particularly when intervention, military or otherwise, might reasonably be expected to halt the bloodshed (Thakur 2011). Such selective enforcement conveys the message that the international community acts only when it is to its advantage, and that R2P is less about human rights protection and more about providing powerful countries with an excuse to pursue their own interests. Thakur argues the norm is also endangered by those who attempt to apply

it to situations beyond the four crimes, for instance protecting indigenous people from climate change (2011:140). Weaker states might legitimately see this as an erosion of their sovereignty and consequently resist R2P as a whole. Each of these endangers the norm by weighting the negative side of the balance sheet used by weaker countries to evaluate R2P.

On the other side of the balance sheet, R2P's second pillar could prove valuable to small states. A risk to R2P here is that the unfolding of events will show the second pillar to have been an empty promise, with more powerful states ignoring their commitments to strengthen the capacity of other states to prevent genocide. Should this occur over the long term, small states may cease to endorse the principle. Already Sri Lanka has attacked R2P as a tool of Western imperialism (Thakur 2011). On the other hand, when powerful countries uphold R2P's second pillar and enhance the capacity of weaker states, it makes R2P a more appealing proposition. Such measures would help balance the risks or costs to small countries associated with R2P, strengthening acceptance.

Many developing countries are at particular risk from climate change. As described in the preceding chapter, climate change could reduce overall government capacity, including the ability to protect their citizens from genocide. Developing countries are therefore eager to see developed countries limit their greenhouse gas emissions. If a major emitter, such as the United States or group of middle power countries, agreed to constrain their emissions because of R2P, this would substantially enhance acceptance of the R2P norm among developing countries. The practical effects of reduced rate and magnitude of climate change could also be considerable, particularly if this were

simultaneously used to leverage concessions on emission reduction from other developed countries, potentially with reference to R2P.

Literature seeking to expand R2P

Previous authors have also addressed the problem of climate change in relation to R2P. For example, Axworthy and Rock advocate for furthering the doctrine through additional legislation to incorporate climate change problems (2009). Although the concept of R2P was "uniquely and solely" designed to deal with the four crimes, Axworthy and Rock believe that its foundational principles can be "unbundled" and applied to other widespread problems (2009:64). They write that the most serious widespread problem to be addressed by an unbundled R2P or R2P-plus is the global challenge of climate change which is "arguably the most serious threat to international peace and security at present" (2009:65). As Axworthy and Rock point out, it is a cruel irony that the countries which bear the least responsibility for climate change will suffer the most by it (2009:65). Therefore, "unbundling" R2P and focusing on climate change-related catastrophes could be a way to gain the Global South's support for the doctrine. Under an "unbundled" R2P structure, an international response to recalcitrant states:

> might start with capacity building, technical assistance and other support. Continued resistance could be met with political pressure, including sanctions. States refusing to do their part could be isolated and face escalating consequences, reinforced by measures taken by regional organizations. In extreme cases, international action might be justified in order to preserve or rescue an environmental asset in which there is clearly a shared and essential interest, or to prevent environmental degradation that would have significant implications for humanity (Axworthy and Rock 2009:67).

Similarly, Caballero-Anthony and Chng examine the idea of "R2P-Plus" which would be an extended R2P doctrine responsive to different kinds of human security threats (2009:135). R2P-Plus is devoid of the potential for armed intervention and instead provides capacity for humanitarian assistance (Caballero-Anthony and Chng 2009:145). The idea of R2P-Plus focuses on the preventative aspect of R2P – maintaining the objectives of R2P, while omitting the possibility of intervention against the wishes of the host state (Caballero-Anthony and Chng 2009:145).

Some have tried to apply R2P to natural disasters which have also involved some action on the part of the state which has led to, or could lead to, the death of its citizens. French Foreign Minister Bernard Kouchner called for an R2P style response from the international community when the Burmese junta refused to allow international relief for the millions of Burmese affected by Cyclone Nargis (Axwothy and Rock 2008:56). Thirty seven townships were significantly affected by the cyclone. Official figures indicate that 84,500 people were confirmed killed and 53,800 went missing (International Federation of Red Cross and Red Crescent Societies 2011).

While the authors above are to be commended for addressing the very real threat of climate change to human security, they differ from the perspective of this thesis in believing that the problem of climate change should be captured within some kind of extension to R2P. In fact, this is unnecessary. The threat of climate change logically falls under the preventative component of R2P as it currently stands because of the link between climate change and genocide. For example, while military intervention after Nargis might indeed have been damaging to Burma and to the future validity of R2P (Caballero-Anthony and Chng 2009:144), action to reduce climate change will limit the likelihood of another cyclone hitting Burma.

Analysis of R2P and Climate Change Genocide

The realisation that the symptoms of climate change will likely contribute to mass violence in the future brings with it a clearer idea as to how the international community can prevent future occurrences. No extension of existing interpretations of R2P is required to acknowledge that military intervention may be permissible when any one of the four crimes are committed, provided the host state is unwilling or unable to halt these crimes and that the other requirements, such as just cause, right intention, and reasonable likelihood of success, are also met. This chapter does not claim any diminution of these constraints. Neither does it argue for an expansion of the accepted purview of military intervention, which requires one of the four crimes to have been committed.

If states have a duty to work together to end atrocity crimes, as set out in R2P, then states also have a duty to refrain from "contributing" to such crimes (Rosenberg 2011:165). This contribution clearly includes environmental destruction. If states aim to mitigate conflict, they must mitigate climate change and ensuing resource scarcity. If states have a positive duty to prevent acts and situations which threaten the lives of individuals, it follows that states have a responsibility to prevent acts which worsen climate change and resource scarcity.

The doctrine of R2P has been used as frequently to oppose intervention as it has to support it. In the case of Darfur in particular, R2P language has been used to legitimise anti-interventionist arguments by claiming that the protection of citizens is primarily the responsibility of the state in question rather than the responsibility of the international community. This argument has been put forward by the Sudanese government, the AU,

the League of Arab States, occasionally by UN officials and at least once by the UK (Bellamy 2005:33, 52).

An inclusion of climate change related conflict in an understanding of R2P could have added to the rhetorical arsenal of the US, the UK and other Western countries hoping to intervene in Darfur. Because the genocide was partly the result of climate change, which Western powers have largely caused, they bear a particular responsibility for intervention. The burden cannot be left to Sudan, the government of which has been complicit in the genocide, or even to African countries: the problem was not just of African making. If Western powers are to intervene in Darfur, it is important for them to also pay more than lip service to prevention and reconstruction elsewhere in Africa. If they showed that they were serious about assuming a particular responsibility for preventing other genocides caused or exacerbated by climate change and rebuilding after their occurrence, they would have a stronger argument for intervention in Darfur.

A policy gap

As Rosenberg points out, states "must take all reasonable measures under the circumstances, to prevent private individuals from infringing upon another's right to life, in circumstances where they know or should know there is a risk[2]. The duty arises when the state has significant influence over the actor committing the infringement or is under a duty of care in relation to the victim" (Rosenberg 2011:173). The influence standard was determined by the ICJ in 2007[3], after Bosnia had, in 1993, sued the Federal Yugoslav Republic (later called Serbia) under Article IX of the Genocide Convention (Rosenberg 2011:179). Placing an onus on states with significant influence

[2] The ICJ determined in it Bosnia v. Serbia judgment of 2007 that there is no requirement that the state has to have knowledge that genocide is occurring or is about to occur, it is enough that the state should normally have been aware of serious *risk* of such an event (Rosenberg 2011:189).
[3] *Bosnia and Herzegovina v. Serbia and Montenegro*, Judgment 2007.

over the genocidal actors goes some way to defining which parties have a responsibility to protect.

In other cases there is clearly a significant gap in policy. R2P places two responsibilities upon the international community: the responsibility to provide aid to and increase the capacity of at-risk states, and the responsibility to intervene when one of the four crimes is occurring. However, these responsibilities are given to the international community generally, and there is little guidance as to which third-party states bear primary responsibility. Hence, in the years since the ICISS report and the adoption of the R2P concept by the UN, the international community as a whole has often failed in its responsibility to protect people from atrocity crimes in such arenas as Darfur, Democratic Republic of Congo (DRC) and northern Uganda. As Rosenberg argues, "if all states are always under some vague obligation to prevent genocide wherever it occurs, than [sic] no one state is ever under any specific obligation to prevent genocide in a particular instance. Such a conclusion would be a recipe for inaction" (2011:182).

Identifying a link between climate change and genocide suggests that states with a disproportionate contribution to climate change bear particular responsibility under R2P. First, they are responsible for reducing greenhouse gas emissions (indeed, global reduction will occur only with the leadership of major emitters). Preventing genocide through preventing or reducing climate change and resource scarcity is a long term strategy. The damage already caused to the environment will have potentially genocidal impacts for many years to come and will take a significant amount of time to correct. Under the traditional concept of R2P, it was required that any threat of violence should be immediate for a state to be deemed negligent if it did not act. An understanding of climate change-related genocide helps clarify a new standard for prevention within R2P.

In the world of *realpolitik*, responsibility for intervention in the four crimes is not evenly spread among all third-party states. Some states have greater capacity to intervene effectively, due to cultural or historical ties with the host country, economic influence or military capacity.

However, capacity to act is not (or should not be) the only determinant of responsibility. Responsibility for bringing the situation into being – what might be called moral responsibility – should also be considered, with the recognition that primary responsibility for the four crimes always rests with the perpetrators. The only norm surrounding moral responsibility at present is that the relationship of having been a former colonial power of a host state where one of the four crimes is occurring creates a greater obligation to intervene than would otherwise be the case. For example, Italy (as well as France and Britain) sent military advisors to assist anti-Gaddafi forces in Libya in 2011; and France recently sent forces into Mali to confront Islamist militants. While this tendency for former colonial powers to intervene is due in part to cultural and historical ties, it is also due to an acknowledgement that colonisation and decolonisation may have contributed to the genocide. Following similar logic, major emitters bear greater responsibility to intervene in the four crimes if these have been exacerbated by climate change. This increased responsibility should be weighed with other determinants of responsibility, including capacity for effective intervention. Use of this logic could decrease instances in which intervention that would halt violence because of a feeling of diffuse responsibility among third-party states.

International climate negotiations and the United States

So far, international climate negotiations have not substantially limited the amount or rate of greenhouse gas emission. The United States is the world's second-largest annual emitter of greenhouse gases, behind only China, though its per capita emissions far exceed China's (*The Guardian* 2011). The failure of the US to ratify the Kyoto protocol, or agree to rapidly and substantively limit its emissions in subsequent negotiations, has impeded adoption of worldwide targets. US participation is essential to avoid runaway climate change (Hansen 2009). Conversely, substantial US involvement, if accompanied by a willingness to curtail its own emissions, could result in a breakthrough in negotiations. Such a situation seems possible in President Obama's second term of office, when he has less to lose, particularly given that he highlighted in his second inaugural address his intention to tackle climate change (Profeta 2013).

Benefits of US action

This chapter proposes that the US should commit to substantially decreasing is greenhouse gas emissions in the near-term, ideally in a binding international agreement with other major emitters including China. In so doing, it should explicitly acknowledge that it does so in part because of R2P. Such action would have several benefits globally and for the US.

As mentioned above, it would strengthen R2P as a norm, and re-emphasise the importance of the second pillar, which focuses on enhancing state capacity. By giving the developing world greater reason to support the norm, it would help insulate the doctrine from almost inevitable subsequent abuses, such as selective enforcement and overextending R2P to justify military interventions where none of the four crimes are present.

The United States is a major emitter of greenhouse gases, and if it were to reduce its emissions substantially, this would in itself slow the rate of global climate change. Such a reduction would likely occur only with substantial investment in green technology development, which in turn would lower costs and facilitate greater international adoption of such technology through market processes. It is unlikely that the US would agree to limit its emissions unilaterally, and entering into international agreements with other major emitters would further multiply the impact of US action to mitigate climate change.

Climate change reduction would also diminish the propensity for conflict described in the previous chapter and widely acknowledged by many of the world's military establishments (Behm 2009, Department of Defense 2010, Sullivan et al. 2007, Schubert et al. 2008, McNeely 2011). Reduced climate change would also substantially enhance future global economic growth (Stern 2007, Garnaut 2008, Garnaut 2011). These two outcomes would enhance geopolitical stability worldwide and decrease the need for military intervention in coming years. Given the long wars in Iraq and Afghanistan, this respite would no doubt be welcomed by the US defence establishment.

US leadership in upholding its responsibility to protect by reducing emissions, and the related benefits described above, would restore and enhance international perceptions of US leadership. US moral authority has suffered in recent years particularly because of its failure to seriously engage with the climate change problem and because of its military intervention in Iraq. Action to reduce climate change as part of R2P would be one of the most effective ways to bolster America's image in the Global South.

Other possible actors

The US may have more to gain by linking R2P with climate change than most other countries, but a number of states could advance their international standing through the strategy outlined above. Action on the part of the US to reduce emissions would do more to preserve the climate than action from most other countries, partly because of the enhancements to international negotiations this would create, and partly because of the unparalleled research and development that the US could bring to the table, though Chinese efforts could soon rival those of the US. Nevertheless, many other states would also benefit from linking R2P with climate change as outlined above. Russia, its image on human rights sullied by its recent invasion of Georgia and unwillingness to allow action in Syria, could use the publicity. Russia, like a number of other major and medium powers that might feel compelled to intervene externally to maintain its interests is the face of declining government stability, might reduce the burden on its military by slowing climate change. Other major powers, or a coalition of major and medium powers, could similarly employ this strategy to their own and the world's advantage.

Conclusion

Climate change is one of several growing transnational problems. It will diminish important resources, exacerbate societal tensions and increase the pressure on state infrastructure. It will likely increase instances of the four crimes under R2P. US leadership is needed to address this growing threat and would be welcomed by many in the developing world. Linking reduced emissions to their responsibility to enhance the capacity of states to deter genocide would have many benefits in addition to the

immediate prevention of violence: it would enhance the reputation of R2P worldwide – which is particularly important to achieve among those who otherwise seek to dilute the doctrine; it would enhance the reputation of the US as an effective protector of the weak; it would further promote the concept of R2P among hesitant developing countries. When applied to genocide to which climate change contributes, R2P increases the options for upstream intervention, addressing the social, political and environmental stresses causes by climate change before any blood has been shed.

Chapter 5: Technology and "upstream" genocide prevention

Introduction

The literature on genocide causation focuses almost exclusively on political causes of genocide. These tend to overlap closely with the immediate causes of genocide, those "downstream" factors which tip an already troubled nation or region into committing atrocities. Virtually no attention is paid to the role of technology in precipitating or retarding genocide. Accordingly, the genocide prevention literature focuses on political/military prevention strategies. For reasons discussed below, these methods are generally restricted to preventing or halting genocides which are imminent or already in progress, and are therefore considered downstream interventions in a pre-genocidal or genocidal state. Because of its focus on interrupting the downstream causes of genocide using measures which are implemented only when it is believed that genocide is imminent, prevention analysis has generated strategies such as sanctions, peacekeeping operations and prosecutions.

These techniques can play a valuable role in genocide prevention and, at times, are the only tools able to stop or halt genocide. Each of these measures has associated costs and is likely to be implemented by the international community in only a limited range of circumstances. Further, the triggers for the implementation of these measures generally involve some level of violence and serious discrimination, making it likely that even when full-blown genocide is averted, lives are nonetheless lost and tensions are raised within the society along ethnic lines, increasing the long-term likelihood of further

genocidal episodes. Recent history shows that impediments to their application mean that they are not always exploited and not always effective when they are employed.

While this thesis in no way seeks to downplay the role of political causes in genocide, the preceding chapters demonstrate that use of technology and its sequelae can either increase or decrease the risk of genocide. This insight suggests the importance of "upstream" causes of genocide, key contributory factors which are not in themselves the tipping points that lead directly to genocide, but which critically increase the risk that such points will be reached. Identification and examination of upstream causal factors opens up a range of upstream genocide prevention measures. The upstream causes of genocide present a number of prospective intervention points for prevention which have received little attention in the genocide literature. These include economic stimulation, promotion of democracy, provision of education and health care and protection and management of environmental resources. These measures are not new but their role in genocide prevention has been largely unrecognised. While each of the upstream preventative measures is associated with implementation costs and factors making it unlikely to be implemented in certain situations, these costs and factors are different from those associated with downstream preventative measures, making the upstream measures a useful complement to them. By looking upstream as well as downstream, genocide scholars can increase policy options for genocide prevention.

This chapter briefly reviews the genocide and broader conflict prevention literatures. It then reviews the three political/military prevention strategies which have received the most attention in the genocide prevention literature: peacekeeping, sanctions and prosecutions. Each has advantages, but all three tend to require a relatively high level of international cooperation, sometimes within timeframes which are unrealistic, while the

first two can be costly and require accurate prediction of impending genocide. The chapter then makes explicit some of the genocide prevention measures implicit in the previous chapters on the role of media. Since the chapter 4 already covered climate change mitigation as a way to decrease genocide risk, the present chapter briefly argues for the role of local environmental protection measures which might partially counter the already-occurring effects of climate change. The chapter also argues for the efficacy of other, developmental upstream prevention measures, including those which do not rely as heavily on technology. Support for healthcare, education, economic growth and democracy in developing countries will decrease the risk of genocide. The chapter concludes that upstream preventative measures, including those which rely on the use of technology, are a useful complement to more traditional, downstream genocide prevention measures.

Major causes of genocide in the literature: upstream and downstream

To prevent genocide, it is essential to try to understand its root causes. Genocide and mass killing do not erupt spontaneously. They are the end product of incremental processes which aggregate and develop into their final form. The genocide literature has produced diverse explanations of genocide. This chapter focuses on structural causes. While these upstream causes are analysed in the broader conflict prevention literature, most genocide scholarship concentrates on the more immediate or "downstream" causes of genocide: those which have already been preceded by some level of violence. Very few trace the causes back to before the violence or repression began.

As mentioned in the introduction to this thesis, a number of political genocidal catalysts have been suggested by prominent writers such as Fein (1984:5), Kuper (1984:39) and Levene (2000). More recently, other genocide scholars have argued that genocide does

not seem to be predetermined or inevitable. Straus adds that while this "casts further doubt on the prospects of a general theory", if genocide is not highly pre-planned, this should provide opportunities for the international community to "shape outcomes" (2007:492,493). The authors mentioned above agree with Fein that war is an important factor in determining when and why genocide occurs (Straus 2007:494) – demonstrating that genocide prevention scholarship can potentially benefit from the more general conflict prevention literature.

The conflict prevention literature

The existing genocide literature does very little to answer the question as to why some conflicts escalate into genocidal killing and others do not (Valentino et al. 2004). It is thus difficult to know how to prevent genocide from occurring once conflict has commenced. There is, however, a significant amount of literature on *conflict* prevention and, if genocide is simply one of the paths down which a disintegrating, conflict-ridden state can go – as Straus puts it, as "part of a range of possible outcomes of violence" (2007:500) – this literature should be utilised. As foreshadowed, this literature includes ways that technology can be used to decrease the likelihood of conflict. It also argues for a number of other upstream prevention measures.

The Carnegie Commission on Preventing Deadly Conflict outlines two broad strategies for conflict prevention. *Operational prevention* involves measures in response to an immediate crisis. *Structural prevention* involves measures to keep crises from occurring in the first place, or to keep them from recurring (1997:xix). Structural prevention approaches "not only make people better off but also inhibit the need to resort to violence" (Hamburg and Holl 1999:368). It also involves the promotion of "thriving states with representative government, the rule of law, robust civil societies and open

economies with social safety nets" (Hamburg and Holl 1999:368). Structural prevention, the "upstream" measures, is lacking from the genocide literature. Some of these measures include:

- Promoting indigenous democracy;
- Fostering equitable socio-economic development, for example, the provision of skills, knowledge, freedom and health; and
- Facilitating education on violence prevention, conflict resolution and mutual accommodation (Hamburg 2010b:12).

Conflict prevention requires a concerted, long-term strategy on the part of the international community, and this must encompass a wide range of developmental measures. No one element of a society can successfully be developed to the neglect of others; they must all be developed in unison. As Hamburg and Holl state, "economic growth without widespread sharing in the benefits of growth will not reduce prospects for violent conflict, and it could exacerbate tensions (1999:374). Importantly, international cooperation is not required to support developmental prevention measures. In fact, state participation is not essential because developmental prevention can be facilitated by NGOs, such as the Bill and Melinda Gates Foundation.

The broader conflict prevention literature presents a number of upstream causes of violence that are, for the most part, not addressed by the genocide literature. Linking with this broader field would provide genocide prevention theorists with an increased number of potential upstream intervention points.

Downstream genocide prevention strategies

The downstream, politically focused prevention strategies, which all but monopolise the genocide prevention literature, share a number of traits. They require action on the part of sovereign states, often in coordination. Their location downstream means that action needs to occur quickly and is reliant on accurate forecasting of impending genocide. The three political prevention strategies most often addressed in the genocide literature – peacekeeping[4], sanctions and prosecutions – are examined below.

Peacekeeping

The most direct form of genocide prevention discussed in the literature is peacekeeping (Woodhouse, Bruce and Dando 1998, Shawcross 2001, Krasno, Hayes and Daniel 2003, and Lebor 2006). Its directness means that it does not rely heavily on theories of genocide causation. Military force is deployed with the aim of stopping violent conflict with the threat or practice of violence which, borrowing from Clausewitz, forces potential *genocidaires* to fulfil peacekeeper's will (1982).[5] The benefit of this option is that success in most circumstances is highly likely if the mission is adequately supported and if the primary goal of the mission is short term genocide prevention. Unfortunately, these assumptions cannot be taken for granted because of the costs and limitations associated with such idealised intervention.

There are three main costs to external countries deploying a peacekeeping mission: financial costs, the lives of its troops, and the commitment of its military forces. The capacity and willingness of would-be *genocidaires* to forcibly resist the intervention

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[4] Peacekeeping is considered a political form of intervention following von Clausevitz's dictum that "war is a mere continuation of politics by other means" (1982:119). This classification is supported by the fact that, in contrast to many technology-based and development prevention measures, only a state can legitimately engage in peacekeeping and that the genocide literature focuses on peacekeeping as a political instrument.

[5] "War therefore is an act of violence intended to compel our enemy to fulfil our will" (1982:101).

force dictates the size of these costs to the international community. Ideally, the intervention force has sufficient war fighting capability to make the option of genocide unattractive to those who might otherwise engage in it, leading to a minimum of casualties both for the intervention force and locals. Constraining the international community's drive to deploy an overwhelming force are opportunity costs that come with military deployment — the inability to project military force elsewhere — and financial costs. Even when an overwhelming international force is deployed, refinement of asymmetrical warfare puts it at risk, as demonstrated in Iraq and Afghanistan. Further, as genocide analyst Benjamin Valentino (2006:740) argues,

> 'humanitarian intervention' is nothing more than another name for war. The ends of humanitarian intervention may be different from those of traditional wars, but the means are much the same. And as human rights advocates understand better than most, war is never cheap or clean. It seldom makes anything better without making something else worse.

One important limitation of peacekeeping missions to prevent genocide is their failure to address the fundamental causes of genocide. Arms alone rarely change hearts and minds. Depending on the specific circumstances, a genocide prevention mission might have to support efforts to strengthen the rule of law, protect the integrity and independence of the judiciary, promote honesty and accountability in law enforcement, enhance protections for vulnerable groups, reintegrate ex-combatants and strengthen civilian control mechanisms. It might also be beneficial to provide support to local human rights organisations (ICISS 2001:23). Technical assistance for equitable reform of the legislative, judicial or penal system could also be given (Cockell 2002:197).

Yet the forced marriage between military intervention and civilian development is often problematic. If military missions are to reduce capability, and civilian missions are to enhance capability, then international actors must be able to distinguish and effectively target the specific people and structures to be disempowered or enhanced. This task, particularly when genocide is imminent and there is a high level of internal tension within a society, is exceptionally difficult.

There is also the risk that foreign intervention which is seen to benefit one group over another will exacerbate internal conflicts. These unintended consequences of humanitarian intervention are liable to bog down military and civilian missions, leading either to premature withdrawal of international forces or increased costs to the countries supporting them. The current geopolitical situation makes large-scale peacekeeping efforts to prevent genocide unlikely in the foreseeable future for two reasons. First, the humanitarian intervention in Libya may have made international support for intervention less likely. To intervene in accordance with international law, an international force requires the authorization either of the government of the country in which intervention is occurring or United Nations Security Council. Yet Russia and China view the recent Western military action in Libya as exceeding that which was authorised, making similar authorizations less likely to pass in the future. Indeed, Russian and Chinese vetoes of Security Council resolutions that would impose sanctions on Syria might be the first example of restrictions on what the Security Council will pass. Russia's UN Ambassador Vitaly Churkin supported such a reading when he told the Council "we simply cannot accept a document … that would open the path for the pressure of sanctions and further to external military involvement in Syrian domestic affairs" (Nichols 2012). A situation with diminished Security Council action,

in turn, may limit future humanitarian intervention to countries where governments acquiesce.

Second, demand for humanitarian intervention often exceeds what the international community is willing to offer. International police, such as UN police (UNPOL), represent the low end of the continuum of force which the international community might offer. It is also generally less costly to participating countries in terms of all three of the types of cost discussed above, than full-scale humanitarian intervention. Despite international demand and the acknowledgement of its importance, UNPOL's deployable capacity is lacking. There is not adequate recruitment, preparation or timely deployment of qualified police to new missions. The UN is also currently unable to adequately manage and guide their police forces (Smith et al. 2007:xiv). As Durch and Berkman point out, "serious lags in police deployments have been chronic" (2006:44). After commencement of a UN mission, it takes approximately nine months for the authorised number of police personnel to deploy. Though member states must offer police personnel to the UN, they are generally reluctant to nominate officers as police are often needed in their own countries and states do not like parting with them (Smith et al. 2007:xiv).

Many of the countries which traditionally contribute to military intervention forces will be reluctant to do so. Even before the global financial crisis, there were far more potentially pre-genocidal situations than there were forces to be deployed. It has traditionally been Western, technologically advanced[6] democracies which engage in peace keeping missions. The global financial crisis has wreaked havoc with the

[6] It is noteworthy that past and proposed intervention forces are often from developed countries with technologically advanced militaries. Technological superiority is often the primary advantage peacekeepers enjoy, while would-be *genocidaires* have the advantages of local knowledge and often numerical superiority. Despite the important role that technology clearly plays in keeping the peace, this receives scant attention in the genocide literature, which focuses on the politics of peacekeeping.

economies of the United States and the European Union as a whole. At the time of writing it seems likely that the military budget of the United States will be reduced, impacting its war-fighting capability. Military deployments are exceptionally expensive, for instance the post 9/11 US wars in Afghanistan, Iraq and Pakistan are thought to have cost up to $4 trillion in US spending through 2011 (Watson Institute for International Studies, Brown University, 2011). The financial situation of Western democracies dramatically reduces the likelihood that they will bear the costs of military engagement solely for the purpose of genocide prevention.

Additionally, many Western democracies are war-weary, having been engaged in Iraq and Afghanistan for years. Their people have little appetite to see more troops come home in coffins. Involvement in both these countries continues to stretch Western militaries, limiting their capacity to deploy forces elsewhere.

Libya provides an example. Col. Qaddafi's government is believed to have participated in the bombing of civilian passenger Pan Am flight 103 from London to New York on 21 December 1988 (what became known as the "Lockerbie bombing"). More recently, he characterised those participating in a revolt against him as "cockroaches", and threatened to execute all those who took up arms against him, strongly suggesting that atrocity crimes were imminent. The opportunity to remove him from power and prevent impending atrocity crimes must surely rank highly on the list of scenarios in which Western democracies would deploy military force in order to prevent genocide or other atrocity crimes. Yet they gambled that airstrikes and political pressure would be enough to achieve their aims, because of an unwillingness or inability to bear some or all of the three types of costs of further involvement.

In summary, humanitarian intervention is an important, last-minute tool to prevent genocide. However a number of factors limit the circumstances under which it is likely to occur. The need for overwhelming force favors intervention by wealthy, technically advanced countries and reduces the likelihood that any countries without a high level of militarily capability will intervene in this way. Yet these countries will have a low willingness to engage in such missions over the medium term. Intervention against potential *genocidaires* with advanced war fighting capabilities is also unlikely because of the need for military dominance. Finally, humanitarian intervention alone does little to address the causes of the genocide and can exacerbate underlying tensions within a society. At best, it simply decreases the intensity or extent of the violence. At worst, it increases suffering and exacerbates tensions.

Sanctions

After a potential genocide has been detected, sanctions may prove an important preventative. Sanctions imposed on a state inhibit its ability to interact internationally, thus dissuading it from pursuing murderous policies (Doxey 1980:9, ICISS 2001:29). This approach can be used in cases when general diplomatic pressure might not appear decisive enough but when the use of force is too extreme (Carter 1988:12).

For expository purposes, sanctions can be classified as economic, diplomatic or military, though overlap between categories occurs. Economic sanctions may target the foreign assets of a country or particular leaders. Restrictions on income-generating commodities such as oil, diamonds, timber and drugs are becoming common. Restricting access to petroleum can also restrict military operations (ICISS 2001:30) — although they can also prove disadvantageous in situations immediately preceding genocide as they could immobilise the victim group. "Freezing" assets is a common

sanction (Alerassool 1993:8,20). Diplomatic sanctions often involve restrictions on diplomatic representation, including expulsion of diplomatic staff. This is largely symbolic and limits the possibility of illicit transactions such as the sale of sanctioned goods, purchase of military-related material or the movement of funds. They might also prove disadvantageous if they diminish contact with the country and thus potential influence. Such sanctions include restrictions on travel for specific leaders. One form would be suspension or expulsion of the perpetrating state from international bodies (ICISS 2001:30). These sanctions are not likely to be successful on their own but they create severe inconveniences for the country's politicians and bureaucrats and cannot be ignored. Military sanctions can also be useful. They can involve arms embargoes or the halting of military cooperation and training programs shared with that country (ICISS 2001:30).

The costs of sanctions to the international community are relatively small compared with armed intervention. Most sanctions involve the cutting of ties between participating sanctioning countries and the sanctioned country or group. The cost borne by each sanctioning country is therefore relatively small, as the sanctioned country or group accounts for only a small proportion of its economic activity, diplomatic interests, arms exports and military relations.

The use of sanctions is associated with drawbacks, however. Most sanctions are blunt instruments that cannot be applied to specific segments of the society. This can lead to civilians suffering or prevent arms sales to victims of genocide, stopping them from defending themselves. Sanctions can be difficult to lift once in place. Each of these unintended consequences of sanctions can make genocide more likely. Additionally, to

be most effective, any sort of embargo must be implemented quickly, often requiring the coordination of many countries.

Most sanctions work best when targeted at either a few leaders or whole countries. There has been little success in applying most sanctions to large, potentially or actually genocidal social groups. For instance, during the 1990s, Bosnian Serbs could not be directly targeted by UN sanctions. Instead, the UN applied a range of sanctions against Yugoslavia, including freezing all Yugoslav financial assets on their territory, stemming the flow of hard currency into Serbia. The goal was to decrease Serbia's ability to support the Bosnian Serbs and prompt Belgrade to urge the Bosnian Serbs to make peace (Sloan 1998:15,46). While the Serbian leader Slobodan Milosevic publicly appealed to the Bosnian Serbs to accept the Vance-Owen peace plan (Sloan 1998:48-49), neither his requests nor the sanctions were enough to halt Bosnian Serb violence.

Even when implemented quickly, sanctions are often indiscriminate weapons and can, on occasion, do more harm to the civilian population than to the targeted group (ICISS 2001:29). If the objective is to bring about economic and social disintegration, making it physically impossible for the state to continue its actions, sanctions may lead to the unexpected suffering and death of civilians (Kuyper 1978:10). This was demonstrated when the UN imposed sanctions on Iraq in 1990. All trans-shipment of oil was forbidden as well as all trade with Iraq, except in medicine and food. They did not have the desired effect, instead causing harm to the Iraqi population. The magazine *U.S. News & World Report* claimed in its 17 May, 1993, issue: "While ordinary Iraqis have suffered fearfully under the international sanctions, smugglers and clandestine sales of Iraqi oil have kept [Saddam] Hussein and his murderous coterie of hangers-on in relative comfort" (Summers 1995:221). As Harff states, wherever possible, "economic

sanctions should not apply to domestic goods, those whose lack would endanger the survival of the population of the culprit state…" (1984:153).

One claim is that civilian populations may be protected by "smart sanctions", those designed to target specific decision-making personnel. This argument dovetails with Valentino's claim that leadership is an important cause of genocide and, where leaders see advantage in genocide, they will frequently pursue it as a strategy (Valentino 2004:4-5). These might involve targeted "financial sanctions, travel sanctions, specific commodity boycotts, and arms embargoes" (GAPWP Programme Statement 2008-2010:24). However, according to Moller, "smart sanctions" are not always smart: there has been a travel ban on Mugabe preventing him from flying out of Zimbabwe. This means that it will be harder for anyone in the country to overthrow him: there is always a greater possibility of ousting a leader who is absent. Smart sanctions, therefore, need to be tailor-made for each situation (2008). The risk is that the international community will outsmart itself with smart sanctions. While efforts to use smart sanctions are frequently made, the negative effects of sanctions are normally more diffuse than intended. Economic sanctions often hurt those already most disadvantaged, as more powerful groups ensure that their relative advantage is maintained. Even when this is not the case, the deprivation caused by sanctions can increase tensions within a society, making genocide more likely.

If genocides tend to occur when the balance of power is tipped drastically in favor of one group over another, then arms embargos can in some situations make genocide more likely, as they prevent the less powerful side from arming itself. Bosnia demonstrated the problems which arise in the implementation of military sanctions. The UN's blanket arms ban in the Balkans, imposed on 25 September 1991, left the two

warring factions unevenly matched: the Muslims defenceless against well-equipped Serbs (Robertson 2002:304, Krasno et al. 2003:239, Gow 1997:37, Ramet 1999:211). The Bosnian Government repeatedly called for the embargo to be lifted to give the state and its threatened people a chance to defend themselves, claiming that it was an illegal breach of its right to self-defence under Article 51 of the UN Charter (Gow 1997:37,38). Once the UN arms embargo had been applied, it was extremely hard to reach an agreement to lift it as there would have to be a vote in the Security Council; France, the UK and Russia were unwilling to lift it (Gow 1997:38).

Speed is essential for embargoes to work. If action is not taken immediately, the target state will have time to anticipate and adjust to sanctions, lessening their damaging impact (Kuyper 1978:10). It can do this through stockpiling materials, finding alternative sources, producing substitutes, stimulating and diversifying national production and imposing controls on key commodities (Kuyper 1978:11, Doxey 1980:106).

Because of the decline of America's superpower status and the economic and military rise of developing countries such as China, coordination between many countries is now required in order for sanctions to be effective. Yet group sanctions produce coordination problems. The countries involved generally have different objectives. Many states, for economic or other reasons, do not apply sanctions strictly (Kuyper 1978:10). Members of the UN, for example, generally avoid decisions about enforcement because they do not agree on the question of culpability and are not prepared to undertake the inherent risks and costs (Doxey 1980:81). Perhaps more importantly, governments often operate in order to maximise their own self interest, rather than for any greater good. The Apartheid case demonstrates a common situation where the self-interest of global super-

powers ranked higher than their humanitarian ideals. Despite global opposition to the regime, serious international sanctions were blocked by the economic self-interests of Britain and the United States. The first mandatory UN sanctions were imposed in December 1963. They were relatively weak, simply proscribing the shipment of equipment and materials for arms manufacture. No serious measures beyond this were adopted until 1985 (Institute for International Economics 1998). Britain and the United States refused to act due to trade interests (Danaher 1989:131,142,143). This illustrates the difficulties of international coordination.

Punishment as a deterrent

If the prosecution and punishment of genocidal criminals acts as a deterrent to others, then it might be viewed as an upstream prevention strategy. For this to be effective, however, prosecution must be rapid and consistent. This has clearly not been the case. Trials have been inconsistent and slow, if they come at all. The most effective forms of trial in terms of global genocide deterrence are most likely to be international tribunals, and yet these are the rarest in the legal history. After the Nuremberg and Tokyo trials of the Axis leaders there were no new international tribunals until the Security Council created the international tribunals for Rwanda (ICTR) and the former Yugoslavia (ICTY) in the 1990s (Fierke 2005:73). While the International Criminal Court (ICC) offers some hope, it prosecutes only when the suspect's own country refuses to do so and there is no guaranteed uniformity in procedure and sentencing (Lebor 2006:220-221).

The deterrent effect of prosecution is lessened the longer it takes to bring criminals to justice, and is negated entirely if trials fail to take place. There was a significant lack of timely punishment for the genocide in Cambodia. The UN-backed Cambodian tribunal

became a reality only recently. The delays in Bosnia and lack of prosecution of leaders of the Sudanese genocide would comfort potential *genocidaires* calculating the odds of prosecution.

The costs of prosecution are often too great to bear, especially for a post-genocidal state. The traditional *gacaca* system implemented after the genocide in Rwanda is an example. There has been a conscientious effort to prosecute all those involved in the killing and, throughout the 1990s, more than 100,000 suspects were forced to wait in detention. More than ten years after the genocide, tens of thousands still awaited trial. This has been a huge economic burden on a country which is already one of the poorest in the world (Schabas 2005:880, Fierens 2005:900).

There are also drawbacks to using the possible deterrence capacity of prosecution as a preventative measure. The existence of tribunals can also serve to hamper the peace process: in a country where atrocities are continuing, the prospect of a trial means that it is more difficult to induce the combatants to sign a ceasefire (Bjorn Moller interview, Danish Institute for International Studies, 29 May 2008). The arrest warrant for Sudanese President Omar Hassan al-Bashir for genocide and crimes against humanity prompted concerns for the fate of a potential political settlement in Darfur (Thakur 2008, de Waal and Stanton 2009).

Effective deterrent prosecution is unlikely to be implemented for several reasons. First, it requires significant finances and resources both on the part of the international community and the country in question. Second, it is often not possible if genocide suspects may have fled or are being protected, potentially by another country. Third, it might not be diplomatically expedient to press charges and risk a delicate peace

settlement. Prosecution can only be classified as an upstream preventative measure if trials are speedy, efficient and uniform. As this is not the case, it probably has no significant deterrent impact and should be viewed as a downstream measure, used to remove from the political arena specific actors who might precipitate genocide again if given the chance.

Analysis of the downstream approach

The three downstream prevention measures examined above all require a medium to high level of international cooperation to be implemented. Armed humanitarian intervention and sanctions require this cooperation to be achieved in a short space of time, once it is clear that genocide is likely. While there have been instances where this has occurred, an ideal policy toolbox would contain prevention measures that did not require a high level of international consensus, regardless of time constraints.

Downstream measures also tend to rely on the knowledge that genocide is about to occur. This means that they are reliant on identification of pre-genocidal situations. While criteria for making such an assessment have been suggested (one of the most prominent examples being that of Fein 1984), the prediction of genocide is far from an exact science. Indicators may not provide sufficient detail regarding the kind, scale, time or place of these incidences. It is still not possible to predetermine the extent of the wider implications, for example, a subsequent refugee crisis (Thoolen 1992:172-171). Beyond questions of timing and scale, there is room for doubt in any prediction of which situations might tip into genocide. Yet doubt provides countries which do not feel it is in their interests to intervene with an excuse for inaction. Even when all countries are operating with the best of intentions, however, the international community may not be able to bear the multiple costs of erring on the side of over-

prediction, or assuming that most or all potentially pre-genocidal situations will turn genocidal. This is particularly true for policy measures with high costs, such as armed humanitarian intervention and some forms of sanctions. Finally, if the international community hesitates until indicators of imminent genocide are recognisable, any measures implemented are likely to come too late to fully avoid death, suffering, and the hardening of ethnic and other divisions.

Upstream, technology-based genocide prevention strategies

The limitations of the downstream political intervention measures discussed above call out for additional policy options, particularly those that are less costly and can be implemented unilaterally, well in advance of the genocide. Technology-based prevention measures satisfy these requirements and could expand the toolbox of those who would prevent genocide.

Media technology

Modern media can be used to inform populations, both within a potentially genocidal state and internationally, of possible threats and problems which might lead to the kinds of pressures on society that promote violence, for example poverty or environmental problems. If the ramifications of these problems are understood well in advance of any violent outcome, it is more likely that affective action can be implemented.

Through increased communication, media can also break down social barriers between different groups and promote cultural understanding. Fear and ignorance provide fertile ground in which genocidal regimes can plant the seeds of racial or group hatred. Increased communication can increase national cohesiveness and reduces ignorance and distrust. Media might even have the power to bridge the divide between opposing sides

who share a long history of violence. In Burundi, joint Hutu-Tutsi media helped create a fragile peace, engagement and cooperation (Armoudian 2011:28). While, unlike its neighbour Rwanda, Burundi did not plunge into full-scale genocide, there were massacres of both Tutsi and Hutu over many years of war. However, in Burundi, Hutus and Tutsis began to engage with each other and heal the ethnic divide (Armoudian 2011:102). Part of the reason for this appears to be that some journalists intentionally started to change media framing. Studio Ijambo was created as a place where Hutu and Tutsi journalists could work together to try to create peace (Armoudian 2011:102). For years, negative framing had been a feature of media in Burundi. Armoudian believes that the journalists at Studio Ijambo sought to answer the question "could media instead be used to help diminish entrenched hatreds and stop future violence?" (2011:103). Similar projects took place in Catalonia, Nicaragua, South Africa and Colombia (Armoudian 2011:28).

Another way in which media technology can provide an affective upstream preventative tool is through its ability to facilitate democracy and promote a cohesive and cooperative civil society. A proliferation of both independent traditional and new media will help to ensure that all citizens are well informed and that they have an adequate level of control over their own lives and the shaping of their society. New media provide useful fora in which citizens can learn of and discuss human rights and self determination.

Climate change and technology

The unsustainable use of certain types of technology has contributed greatly to climate change. For example, technological development has led to resource scarcity and pollution. There are, however, certain technological developments that counter climate

change and its symptoms, for example, "green technology" such as solar power. A possible plan for reducing climate change, and thus conflict, through linking it to the doctrine of R2P was discussed in a previous chapter. Climate change increases the risk of genocide by increasing stress on local environments. Localised environmental protection programs could, therefore, be employed to ameliorate these stresses.

Because climate change, and subsequent resource scarcity, increases the risk of conflict and genocide, it follows that technology able to mitigate it provides a useful tool for conflict prevention. The link between environmental protection and conflict prevention is recognised by scholars and policymakers outside of genocide studies (Homer-Dixon and Blitt 1998). As Hamburg and Holl point out, natural resources often lie at the heart of conflicts which have the potential for "mass violence". Perpetrators sometimes manipulate resource shortages for their own ends, for example, using food or water scarcity as a weapon. Conflicts can also arise over competing claims of sovereignty over certain resources such as rivers or oil. Increasingly, there is "environmental degradation and resource depletion in areas characterised by political instability, rapid population growth, chronic economic deprivation and societal stress" (Hamburg and Holl 1999:373). Environmental management is important if we are to prevent genocide and mass killing. Hamburg and Holl argue that more effort is needed to develop "sustainable strategies for social and economic progress" and that this sustainability is likely to become a key principle for development (1999:373).

Conflicts based on environmental resources are most likely to occur in the world's poorest countries, those least able to implement sustainable development. The importance of environmental protection in conflict prevention has been recognised and, as a result, is being incorporated into some aid and development programs. In 2005, the

Division of Early Warning and Assessment (DEWA), within the United Nations Environmental Programme (UNEP), developed the "Environment and Conflict Prevention Initiative". This initiative is designed to "promote conflict prevention, peace, and cooperation through environmental protection, restoration, and resources" (Environmental Change and Security Program, Woodrow Wilson Center 2005). The World Bank has acted as a trustee for the Global Environment Facility (GEF), which is "designed to add environmental dimensions to projects funded for more general development purposes" (Payne 1998).

Assistance packages might be used to tie border groups in one or more countries to their shared interests in land and water development and environmental protection (Hamburg and Holl 1999:374). Environmental protection and development can also strengthen a country's economic growth and population health.

Other upstream strategies

Thoughtful use of media and environmental protection can aid genocide prevention upstream. This suggests the possible utility of other upstream prevention measures. The broader conflict prevention literature argues that development aid of various sorts reduces the risk of conflict. Development aid is in some sense always related to technology, "the sum of the ways in which a social group provide themselves with the material objects of their civilization" (Webster's Encyclopedic Unabridged Dictionary of the English Language, 1983). Types of development aid nevertheless exist on a technological continuum. New media, green energy and healthcare technologies are broadly at one end of this continuum, while promotion of democracy is at the other. This thesis makes a brief detour down this continuum to demonstrate the efficacy of a wide range of upstream prevention measures. While this deviates from the technology-

based thrust of the thesis, it supports its implicit contention that genocide scholarship should expand the range of its inquiry into the causes of genocide and its prevention.

Because of the problems of genocide prediction, upstream prevention measures will need to be applied to a broad range of situations, some of which would not have become genocidal. Therefore, they should have positive outcomes beyond genocide prevention. Technological and other forms of development aid meets all of these criteria, yet with very rare exceptions (Hamburg 2010a, Hamburg 2010b), the genocide literature pays little attention to development as a form of prevention. Development should ideally occur across a broad range of areas simultaneously, including those discussed below.

Health care

The links between health and conflict have not been fully explored. Furst et al. state that "an adverse public health situation may spur violent conflict, and violent conflict may favor the spread of infectious diseases". A better understanding of this dynamic would help make critical infrastructure and public health systems "crisis-proof" and thus reduce the occurrence of armed conflict (Furst et al. 2009).

Health serves as an effective bridge to peace for several reasons. First, health is a shared interest valued throughout the world. Second, health interventions have an immediate impact of people's lives, as well as long term benefits. They inspire "trust, confidence, and hope" in the societies in question and, in many cases, further development cannot be achieved without first reducing illness and death – for example, in African countries ravaged by AIDS (Hamburg 2008:42). Third, health interventions are seen as largely non-ideological and thus more acceptable than some other programs (Hamburg 2008:42). The advanced medical capabilities of Western nations place them in an

excellent position to implement "medical diplomacy" or "health diplomacy". Without clean drinking water and medical care, anger and frustration can grow within a society, leading to internal and regional conflict. Many of the world's current conflict zones – Sudan, Somalia, the Democratic Republic of Congo, Palestine and Sri Lanka – also "bear disproportionate burdens of disease". Medicine is rightly seen as a peacekeeping tool (Wexler 2009).

Beyond the direct links between health and peace, healthier populations are also more economically productive (Hamburg 2006:35). Health and internal stability are linked: "healthy populations are able to work, cultivate food, and earn wages, all of which contribute to economic productivity and a functioning society" (Wexler 2009).

Economy and infrastructure

When poverty exists alongside ethnic or cultural divisions, mass killing can result. The provision of economic equality might thus prevent genocide. In the long term, there needs to be a general promotion of economic growth through better terms of trade. This involves allowing developing countries greater access to external markets, encouraging necessary economic and structural reform, and providing technical assistance for strengthening regulatory institutions (ICISS 2001:23). The World Bank launched its Operational Policy on Conflict and Development Cooperation in 2000, committing it to more vigorous action regarding countries at risk, experiencing or recovering from conflict (Cleves et al. 2002:322).

Economic development can increase risk of genocide if it occurs for just one group, however. Fein notes that development of unsettled land by states or multinational companies often creates conflict with the indigenous people, as profitable expansion

provides the incentive to destroy indigenous people either directly or indirectly. She therefore advocates institutionalising Human Rights Impact reports, similar to Environmental Impact reports, before such a project is approved (1999:469).

Education and skills

Education may be an important component of genocide prevention. As David Hamburg states,

> Just as lifelong learning in mathematics, science, and technology is essential for the success of a modern economy, so too the teaching of pro-social behavior across the life-span can help to prevent immense destruction. This involves explicit information and hands-on experience with conflict resolution, violence prevention, mutual accommodation between groups, and conditions conducive to peaceful living (2008:1133).

It has been suggested that the education of women is a lucrative development investment in developing countries. Education increases the skills and choices of women, and of their children. Education also helps to delay marriage – partly because of an educated woman's greater chances for employment – and increase knowledge and use of family planning (Hamburg 2006:37). Reduced population growth means that the society will place less pressure on the environment.

Democracy

Political inequality provides fertile ground for genocide. Promotion of democratic systems and values around the world is an important preventative measure. Democracies generally provide higher levels of "public goods" to their populations than non-democracies. In order to maintain office, democratic leaders must win the support

of a majority of citizens. In non-democracies, leaders owe their power to a smaller, less representative group of supporters (Valentino et al. 2010:529).

Countries in which rights and participation are based on ethnicity are more likely to lead to genocidal situations than nations which base these things on common citizenship. It is important to promote integration through establishing decentralised power-sharing and forums for multi-party dialogue. It might also be necessary for a peace-building mission to provide technical assistance in order to reform deficient governance institutions such as the judiciary, the police or the civil service. Supervising transitional elections and supporting a free press is also significant (Cockell 2002:197, ICISS 2001:23).

Conflict is common in societies which lack a democratic political system capable of managing disputes peacefully through dialogue, negotiation and compromise (Save-Soderbergh and Lennartsson 2002:359). A preventative mission should therefore ensure that all major groups in society participate in political power, administration, the army and police. It is not just a matter of creating democracy, as majority rule can still bring about the persecution of minorities. A preventative mission should oversee the development of checks and balances in political institutions (Stewart 2002:127). According to Horowitz, a mitigation of conflict can be achieved through the use of political incentives to encourage inter-ethnic moderation, for example, if politicians must rely in part on the votes of members of groups other than their own in order to be elected (Horowitz 2003:12,14). Establishing political inclusivity is particularly difficult; nevertheless, there have been instances in which it almost certainly prevented conflict.

The UN planning and supervision of Cambodian elections in 1993 probably prevented

future conflict in that country. The aim was the introduction of democracy and peace to Cambodia, a country which had undergone 22 years of civil war. The United Nations Transitional Authority in Cambodia (UNTAC) protected the electoral process and ensured civil order, while the actual electoral process was run by UN volunteers. This involved the registration of the 4.8 million prospective voters. Despite difficulties, the electoral process was a success (Shawcross 2001:54,55,63). The mission repatriated over 350,000 Cambodian refugees and opened up Cambodian society to "press freedom, pluralism and grassroots organisations independent of the state and governing party" (Fawthrop and Jarvis 2005:107).

Legal inequality is prevalent in high-risk societies. The protection of law is an essential component of genocide prevention. The rule of law "forms the basis for the just management of relations between and among people. It also helps ensure the protection of fundamental human rights, political access through participatory governance, social accommodation of diverse groups and equitable economic opportunity" (Hamburg and Holl 1999:375). The promotion of justice should emphasise three areas: human rights; humanitarian law; and non-violent alternatives for resolving disputes, including more flexible intrastate mechanisms for mediation, arbitration, grievance recognition and social reconciliation. These areas require constant attention through democratic processes (Hamburg and Holl 1999:375).

Conclusion

One limitation to technology-based and other forms of upstream genocide prevention is that it is unclear which, if any, genocides were prevented. This raises challenges for

scholars seeking to study this form of prevention and for political leaders seeking to justify the costs. Valentino states that while the costs of prevention in a conflict will be much less than a purely reactive intervention, these costs must be multiplied many times because these prevention measures are likely to be applied to many crises that would never have become genocidal (2006:735). However, if prevention measures enhance development, as do all the examples discussed above, then benefits include not just averted genocides, but the prevention of more conventional violent conflicts, decreased social unrest, reduced population growth, increased economic development, healthier populations and more robust environmental systems. These are valuable outcomes, not just for the country or region directly impacted, but for the world community.

Technology-based and other forms of upstream intervention, particularly involving aid and development programs, also generally avoids issues of state sovereignty. A serious issue in cases of armed intervention in genocide, state sovereignty can be even more problematic in cases of prevention when genocide is imminent but has not yet occurred. How does one justify sanctions, a military presence or fact-finding investigations when no atrocity has yet been committed, forfeiting a state's sovereignty? Even without the legal questions, until atrocities are committed, the people may "prefer their tyrants rather than see their homeland overrun" (Teson 2003:105-106). Few countries are likely to reject a broad, well-planned technical and development aid package on the grounds that it interferes with state sovereignty, even if they resist democratic reforms.

Options to prevent genocide must include more than just downstream policies. While downstream policies can be crucial to stop deadly violence, by themselves they do not result in real peace, rather a cessation of violence. A wide ranging program of technological and other forms of development aid is perhaps the best means of

preventing genocide in the long term. Prosperous, healthy nations with educated populations and economic and legal equality are unlikely to witness genocide. Technology-based and other forms of upstream strategies for prevention complement the downstream strategies on which genocide literature has focused and are worthy of exploration as methods to prevent genocide.

Chapter 6: Conclusion

Despite the increasing scholarly focus on genocide and mass atrocity crimes, the critically important issue of prevention has been largely neglected. While several theories of causation have been developed, these mostly focus on the political motivations involved and cannot be used to facilitate any prevention strategy that is not a downstream measure, taken only when violence is imminent or has already begun. This approach may not prevent individual acts of genocide in the short term, and will certainly not succeed in creating peace in the long term as it does not address the root causes of genocide. This thesis has attempted to explore a more complete approach. Through the perspectives of climate change and new media, it has considered technology use, its impact on genocide and its potentially significant "upstream" contributions to genocide prevention.

This study has analysed two aspects of technology use: media and climate change. Both have grown and evolved at increasingly rapid rates in recent decades. The use of technology can be a facilitator of genocide and also offer a solution to the problem. Technology use in the form of modern news media is assisting genocidal groups to spread disinformation and coordinate violence; in the form of new media, however, it provides opportunities for both domestic and international resistance through greater diversified channels of direct and immediate communication. Similarly, increased technology use has been identified as a major cause of climate change. The subsequent societal pressure can increase the risk of genocide. At the same time, use of technology can be used to alleviate climate change and create sustainable societies.

Analysis of the relationship between government and media through case studies and the two major theories on the subject – the CNN theory and the theory of manufacturing consent – reveals that the two theories are not necessarily mutually exclusive. There are likely to be elements of both at play at any one time. In either case, whether it is influencing or being influenced, the media bear a grave responsibility.

The growing phenomenon of "citizen journalism" has contributed to the major arms races which will shape the relationship between new media and genocide. These include the domestic race between potential *genocidaires* and potential victims; and the international race between *genocidaires* and victims vying to influence international public opinion and policy, and also that between traditional and new media as each tries to establish and expand its niche. "Grass roots influence" has so far been ignored in the literature. It can be seen in the prominence which the "free Tibet" movement has been able to develop. Social media, by de-centralising control and allowing for pluralism, currently presents a significant opportunity for genocide prevention.

The literature on climate change presents overwhelming evidence that climate change causes resource scarcity and, through it, increases the risk of conflict which is likely to include genocide. Because of the strong evidence linking climate change and genocide, the international community can prevent genocide in at-risk states under R2P, as it currently stands, by mitigating climate change. No expansion of R2P is necessary for the development and implementation of strategies to achieve this. Not only would this reduce the risk of genocide, it would also enhance the acceptance of R2P around the world. When applied to genocide in which climate change contributes, R2P also increases the options for upstream intervention, before killings have occurred.

Genocide prevention scholarship would benefit from expanding its focus beyond the overtly political issues and consider the risk factors that build pressures "upstream" from the imminent or actual explosion of violence. Aspects such as poverty; lack of freedom, education and health care; and environmental degradation and resource scarcity all increase the risk of genocide. Technology use relating to modern media and climate change provides a means through which to alleviate these problems. First, new media can be used to inform both domestic and global populations about potential threats to peace and problems which might lead a society to violence, such as poverty or resource scarcity. Through increased communication, media can also break down barriers between different groups and promote cultural understanding. A free media is also an important support to democracy and new media is a particularly useful tool for building the sort of civil society necessary for democracy. Second, because the symptoms of climate change, such as resource scarcity, increase the risk of genocide both now and in the future, technology used to combat climate change and its symptoms have become useful upstream preventative tools.

The international community's preventative efforts have been limited in their focus. Theories of genocide causation and prevention need to be expanded to take technology use into account. Technology can influence power dynamics between states, between governments and their people, corporations and individuals; and corporations and governments. In contributing to climate change, certain types of unsustainable technology use increase the risk of genocidal violence.

This thesis examined two aspects of technology use. There are many more which might be relevant to genocide and prevention research. Food production is a major example. The distribution of food production, the questions of what is being produced, who is

producing it and the way in which it is produced, will become increasingly important. Due to arable land scarcity, some countries are buying up "spare" farmland overseas. China has bought millions of hectares in the Philippines and Laos and its Ministry of Agriculture has proposed foreign land acquisition as an explicit strategy. Other countries reported to have bought foreign land, mainly in Africa, for food or biofuel production include the United Arab Emirates, South Korea, Saudi Arabia, Malaysia, Qatar, Bahrain, Kuwait, India, Sweden, Libya, Brazil, Russia and the Ukraine (Cribb 2010:51).

The technology around genetically modified food – together with associated issues of intellectual property, licensing and restrictions – will also be increasingly important. Climate change not only affects crop growth and yield but can also increase plant pests and pathogens (Gregory et al. 2009). The use of petroleum is also relevant. The world is currently dependent on petroleum-based fertilisers for its food production (Cribb 2010). If alternatives are not found, wars over dwindling petroleum resources will take on an added ferocity. Research into more sustainable water management will also be important as climate change is expected to affect the distribution and quality of freshwater resources (Kundzewicz et al. 2008). Water scarcity in Southern Africa, for example, provides a great potential for conflict in the fifteen international river basins in that area. These rivers are also vital for socio-economic development, farming and hydroelectric power (Tanzler et al. 2004).

Cases of genocide occur as one writes. Hitherto "safe" communities and ethnicities are now endangered, radical changes in climate patterns produce both physical and political upheavals. Keeping up with events is often a disenchanting and harrowing experience, made more frustrating as one sits in the comfort zone of democratic and peaceful

Australia. The political debate here still centres on whether there is such a thing as "climate change". For the people at the receiving end, for the peoples described in this analysis, there can be no debate.

This study opens the door to further research pathways which explore the link between technology use and genocide prevention. The need is urgent. The international community can chose to allow technology to develop without direction and with possibly destructive results, or work towards harnessing this force to prevent genocide.

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